TYLER JUNIOR COLLEGE

TYLER, TEXAS

Annual Catalogue

1963-1964

With

Announcement of Courses

1964-1965

TYLER JUNIOR COLLEGE

EAST FIFTH STREET

\+ +

ANNUAL CATALOG

1963 - 1964

WITH

ANNOUNCEMENTS FOR

1964 - 1965

\+ +

TYLER, TEXAS

TABLE OF CONTENTS

Page

Accrediting of the College 14
Activities 26-27
Administration 6
Admission Requirements 14
Adult Education 19
Apache, College Yearbook 26
Apache Belles 26
Athletics 27
Attendance Requirements 14
Band 26, 81
Calendar, College Year 1964-65 ..... 4, 19, 20
Choir 27
Counseling 15
Course Descriptions —
- Agriculture 35-36
- Art 36-37
- Astronomy 44
- Bible 37
- Biology 37-38
- Business Administration and Data Processing 38-41
- Chemistry 41
- Distributive Education 55
- Drafting 63-65
- Economics 41
- Education 42
- Electronics 65-69
- Electronic Data Processing 41
- Engineering 42
- English 42-43
- Foreign Language 43-44
- Geology 44
- Geography 44
- Government 45
- History 45-46
- Home Economics 46
- Industrial Instrumentation 66, 68
- Journalism 46-47
- Mathematics 47-49
- Mechanical Drawing 64
- Meteorology 44
- Music Catalogue 73-82
- Music Courses 76-82
- Nurses Training, Courses in 31-32, 49-51

TABLE OF CONTENTS

Page

Petroleum Technology 60-63
Pharmacology 51
Physical Education 51-52
Physics 52-53
Psychology 17, 53
Reading Improvement 43
Sociology 53
Speech 53-54
Surveying 69-70
Television 67-68

Courses, Numbering of 18
Courses, Suggested for Freshmen 28-34
Credit, Explanation of 18
Degrees
Associate in Arts 15
Associate in Business Administration 16
Associate in Applied Engineering 16
Associate in Science 16

Faculty 7-12
Grading System 15
Graduation Requirements 15, 16
History of Tyler Junior College 13
Library, Description of 18
Music Majors, Curriculum 74
Night School, The Evening Division 19
Nursing Program, Registered 31-32
Objectives of the College 14
Proficiency Certificates 16
Reports to Parents 15
Refunds 21
Scholarships, Awards, Loan Funds 21-26
Social Activities 26-27
Student Housing 18-19
Student Load 19
Student Organizations 26-27
Student Senate 27
Summer Session 4
Technical and Industrial Division 59-70
Transfer of Credit 14, 18
Tuition and Fees 20-21
Vocational Rehabilitation 26

GENERAL COLLEGE CALENDAR

1964 - 1965

\+ +

ADVANCE REGISTRATION

The administrative offices are open throughout the summer for advance registration. Thorough and leisurely counseling is available on degree plans and technical courses and vocations. Students may arrange appointments from 8 a. m. until 3 p .m. Mondays through Fridays.

FALL SEMESTER, 1964

September 2	Final Registration
September 3	Freshman testing and orientation
September 7	Classes Begin
November 26-27	Thanksgiving Holidays
December 21	First Christmas Holiday
January 4, 1965	Classes Resumed
January 12-19	Fall semester final examinations

\+

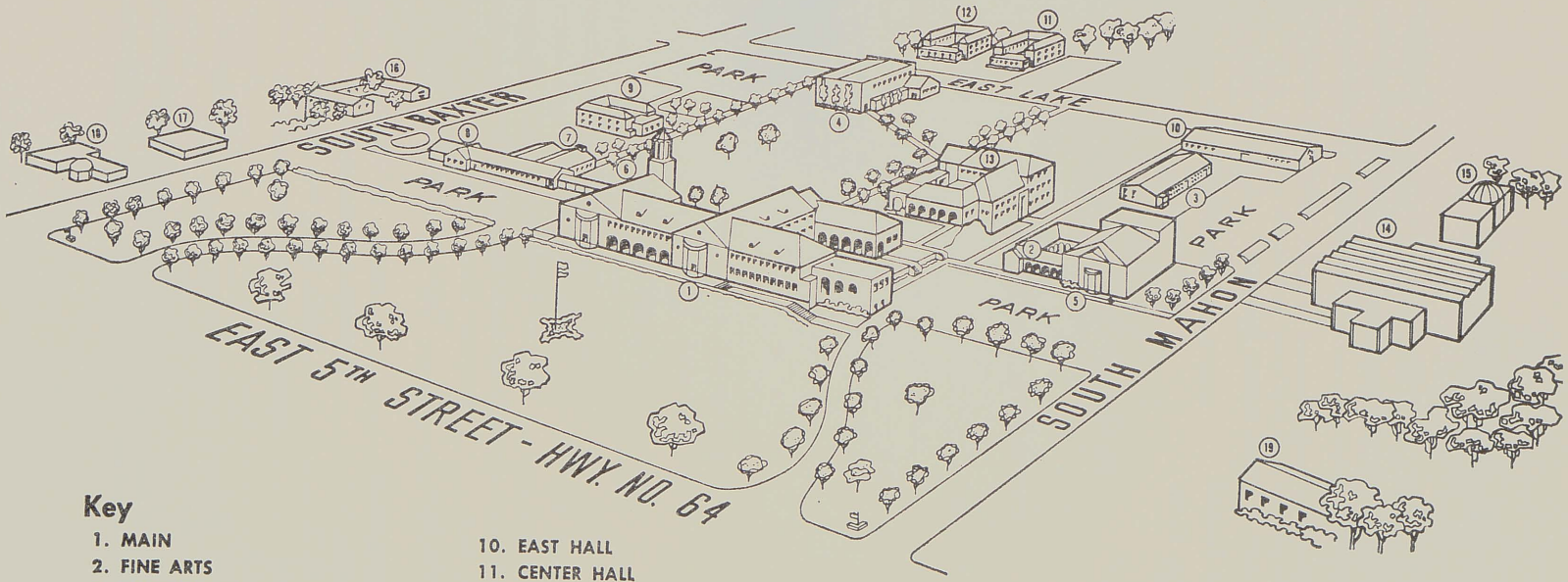
SPRING SEMESTER, 1965

January 20, 21, 22	Registration for Spring Semester
January 25	Classes Begin
April 16-19	Easter Holidays
May 11	Honors Day
May 18-25	Final Examinations
May 28	Commencement

\+

SUMMER SESSION, 1965

June 1	Registration
June 2	Classes Begin
July 13	First Term Ends
July 15	Registration for Second Term
July 16	Classes Begin
August 26	Second Term Ends



Key

1. MAIN
2. FINE ARTS
3. TECHNOLOGY
4. GENTRY GYMNASIUM
5. WISE AUDITORIUM
6. LIBRARY
7. STUDENT UNION
8. DINING HALL
9. LILLYE MAE VAUGHN HALL
10. EAST HALL
11. CENTER HALL
12. WEST HALL
13. ACADEMIC BUILDING
14. GYMNASIUM
15. HUDNALL PLANETARIUM
16. BAPTIST STUDENT UNION
17. CHURCH OF CHRIST BIBLE CHAIR
18. METHODIST BIBLE CHAIR
19. PRESBYTERIAN BIBLE CHAIR

CAMPUS OF TYLER JUNIOR COLLEGE

Board of Trustees

Watson W. Wise ..... President
A. D. Clark, Jr. ..... First Vice-President
Dr. Jim M. Vaughn ..... Second Vice-President
Ava Lea Gentry ..... Secretary

Cecil Bagwell — Mrs. Arthur Squyres — J. Paul Price
Hubert Tunnell — Ira Hildebrand
George Pirtle — Homer W. Eikner

* * * *

Executive Officers

Harry E. Jenkins, Ph.D. ..... President
Edward M. Potter, M.A., LL.D. ..... Dean
Richard H. Barrett, M.B.A. ..... Business Manager
Edwin Fowler, B.A., M.Ed. ..... Registrar

* * * *

Department Heads

Joseph Kirshbaum, Mus.M. ..... Music
Forest Griffin, M.S. ..... Technical Education
Irving L. Friedman, B.S. ..... Dean of the Evening Division, Director of the Hudnall Planetarium and Coordinator of Distributive Education
Mary Wallace, M.A. ..... Director, Counseling and Guidance
Elizabeth Bryarly, M.A. ..... Dean of Women (Counselor), English
Wiley W. Jenkins, Ph.D. ..... History and Social Science
Louise Clinkscales, M.B.A. ..... Business and Secretarial Training
Jean Browne, Ph.D. ..... Public Speaking and Dramatics
Ava Lea Gentry ..... Personnel
Troy Smith, LL.B. ..... Attorney
Mabel Williams, M.A. ..... Mathematics
J. C. Henderson, M.A. ..... Science
Floyd Wagstaff, M.A. ..... Athletics and Physical Training
Evelyn Crow, M.S. ..... Librarian

FACULTY

Harry E. Jenkins.....President
B.S., Kansas State Teachers College; M.A., The University of Missouri; Ph.D., The University of Texas

Edward M. Potter.....Dean
B.A., M.A., The University of Texas; LL.D., East Texas Baptist College.

Johnny Abbey.....Business
B.B.A., M.B.A., The University of Texas.

Margaret Anders.....Assistant Librarian

Prudence Arnold.....Physical Education
B.S., North Texas State University.

Vartenik Baghdassarian.....Mathematics
B.A., M.A., The University of Texas.

Drucilla Bain.....Art
A.B., Georgetown College.

Jean Baldwin.....Nursing
B.S., Northwestern State College of Louisiana.

Beth Banks.....Nursing
B.S., University of Texas.

James F. Barnes.....Government, Economics
B.A., Mississippi College; M.A., The University of Mississippi.

Richard Barrett.....Business Manager
B.B.A., East Texas State College; M.B.A., Texas A&M University.

Dayton Bateman.....Drafting
B.A., The University of Texas.

Jack W. Betts.....Engineering Drawing, Drafting
B.S., East Texas State College; M.Ed., East Texas State College.

Lawrence Birdsong, Jr.....Speech, Drama
B.A., Baylor University, M.A., East Texas State College.

Gene Blakely.....Business Administration
B.B.A., North Texas State University.

A. L. Blanton.....English
B.S., M.S., Stephen F. Austin State College.

Mary Bourne.....English
B.A., Austin College; M.A., The University of Chicago.

Jean Browne.....Speech, Drama
B.A., Mt. Holyoke College, B.A., Carnegie Institute of Technology, M.F.A., The University of Texas, Ph.D., State University of Iowa.

FACULTY (Continued)

Elizabeth Bryarly.....English
B.A., Baylor University; M.A., The University of Texas.

Julius Buchanan.....Petroleum Technology
B.S., The University of Texas.

John Maxwell Burket.....Chemistry, Geology
B.A., M.S., Baylor University.

Mary Burton.....English
B.A., M.A., Sam Houston State College.

Edith Chilcote.....Assistant Librarian

Louise Clinkscales.....Business
B.B.A., Baylor University; M.B.A., East Texas State College.

Milford T. Collins.....History
B.A., East Texas Baptist College, M.A., Stephen F. Austin State College

Evelyn Crow.....Librarian
B.A., Southwestern University; M.S., East Texas State College.

Herman L. Crow.....History
B.S., M.S., North Texas State University; Ph.D., The University of Texas.

Kenneth Dacus.....Business
B.B.A., M.B.A., East Texas State College.

Marvin P. Davis.....Mathematics
B.S., Lamar State College of Technology; M.A., Louisiana State University.

Dan Danner.....Bible, Director Church of Christ Student Center
M.A., Abilene Christian College.

Kathryn Dobbs.....English
B.A., Arkansas State Teachers College; M.A., The University of Arkansas.

Kenneth Evans.....Mathematics
B.A., East Texas State College; M.A., The University of Texas.

Lena Exum.....English
B.A., Mississippi State College for Women; M.A., University of New Mexico.

H. E. Eyley.....Sociology
B.S., M.S., Texas Christian University.

Sara Bess Faulk.....Assistant Librarian

Norman Ferguson.....Bible, Director Baptist Student Center
B.A., Baylor University; B.D., Southwestern Baptist Theological Seminary.

Edwin Fowler.....Registrar, Band
B.A., Baylor University; M.Ed., East Texas State College.

Irving L. Friedman.....Dean of Evening Div., Distributive Education, Director, Hudnall Planetarium
B.S., East Texas State College.

Ava Lea Gentry.....Administrative Assistant

FACULTY (Continued)

Ruby Gentry.....English
M.Ed., Stephen F. Austin State College.

Robert Glover.....History, Government
B.A., M.A., Stephen F. Austin State College

Averille Greenhaw.....Home Economics
B.S., Oklahoma State University.

Cecil Greer.....History, Government
B.A., University of Miami, M.A., University of Georgia

Forest Griffin.....Drafting
B.S., East Texas State College; M.S., East Texas State College.

George Griffin.....Business
B.B.A., Southern Methodist University.

La Rue Hardee.....Nursing
B.S., The University of Wyoming.

James L. Hallmark.....Physical Education and Football Coach
B.S., Texas A&M University; M.A., Stephen F. Austin State College.

John Fletcher Harvill.....Mathematics
B.A., M.A., Northwestern State College of Louisiana.

Richard Heitzman.....Speed Reading
B.CH.E., University of Florida

Joseph C. Henderson.....Biology, Chemistry
B.A., Rice University; M.A., The University of California at Berkeley.

Charles M. Hix, Jr.....Physics
B.S., M.S., Texas A&M University.

Loretta Holbrook.....English
B.S., M.A., Stephen F. Austin State College

Jim Anna Honig.....Nursing
R.N., Harris College of Nursing

John R. Hunter.....Music
B.S., University of Alabama; M.A., Teachers College, Columbia University.

Gary Jackson.....Business Law
B.A., Southern Methodist University, L.L.B., Baylor University.

Gloria Jackson.....History
B.A., Texas Christian University; M.A., Southern Methodist University.

Wiley W. Jenkins.....History, Government
B.A., The University of Mississippi; Ph.D., The University of Texas.

FACULTY (Continued)

Elton Wayne Keith.....History
B.A., M.A., Baylor University, M.A., Peabody College

Joseph Kirshbaum.....Music
Mus.B., Yale University; Mus.M., Yale University.

Gertrude Kirshbaum.....Music
Diploma in Music, Yale University.

Barbara C. Knott.....Nursing
B.S., Illinois Wesleyan University

James N. Lewis.....Government, Economics
B.S., North Texas State University.

Kenneth D. Lewis.....Agriculture
B.S., Texas A&M University.

Marilyn Melin.....English
B.A., M.A., The University of Texas.

Gertrude McDonald.....English
B.A., North Texas State University.

Harry Miller.....Bible, Director Presbyterian Bible Chair
B.A., The University of Miami, B.D., Columbia Theological Seminary.

Patricia Miller.....Business
B.B.A., Stephen F. Austin State College.

H. F. Mills.....History, English
B.A., M.A., Rice University.

T. Roger Moore.....Mathematics
B.A., M.A., Appalachian State College

James Murray, Jr.....English
B.A., Baylor University; M.A., The University of Texas.

David Pena.....Surveying
Licensed Civil Engineer and Land Surveyor.

James H. Peterson.....Psychology, Sociology
B.A., The University of Minnesota, M.A., Texas College of Arts and Industries.

Blanche Prejean.....English, Journalism
B.A., Texas Wesleyan College; M.A., Stephen F. Austin State College.

Pauline Pynes.....Business
B.B.A., M.B.A., East Texas State College.

FACULTY (Continued)

Mac Reynolds.....Physical Education and Assistant Football Coach
B.S., North Texas State University.

Robert Reynolds.....Piano
B.M., Oklahoma State University; M.M., University of Oklahoma.

Herbert L. Richardson.....Physical Education
B.S., The University of Houston, M.Ed., University of Houston.

Ernest Roberts .....Business
M.S., East Texas State College.

Tom Robinson.....Geography
B.A., M.A., The University of Oklahoma.

Herbert R. Rohloff, Jr.....Bible, Director Methodist Student Center
B.A., B.D., Southern Methodist University.

Leo Rudd.....Guidance and Counseling
B.A., William Jewell College, M.S., East Texas State College.

Phillip Rutherford .....English
B.A., East Texas State College.

John B. Saleh, Jr.....Business Administration
B.B.A., East Texas State College; M.B.A., North Texas State University.

Martin Z. Sammons, Jr.....Oil and Gas Law
L.L.B., Baylor University

Eva Saunders.....Speech, English
A.B., Baylor University; M.A., The University of Texas.

Richard Schaefer.....Electrician Apprentices
Technician.

Edward Simmen.....English
B.A., M.A., The University of Texas.

L. M. Sims.....English
B.A., M.S., Jacksonville State College.

Walter S. Smith.....Radio-Television
FCC Licensed Radio - Television Engineer.

Sammie M. Smyrl.....Mathematics
B.A., East Texas State College; M.A., The University of Texas.

Maylan Soileau.....French
B.S., M.S., University of Southwestern Louisiana.

FACULTY (Continued)

Sue Ann Stewart ..... Nursing
R.N., B.S., The University of Texas.

George Stiles ..... Biological Science
B.S., Sam Houston State College; M.A., Colorado State College of Education.

Ethel Stokes ..... Director, Women's Residence Hall

Clarence Strickland ..... Speech
B.S., M.S., East Texas State College.

Lorene Strickland ..... English
B.A., M.A., Stephen F. Austin State College.

Hugh C. Tomlinson ..... Business
B.S., M.Ed., East Texas State College.

Floyd Wagstaff ..... Director of Physical Education and Athletics
B.S., Stephen F. Austin State College; M.A., North Texas State University.

Mary Frances Waldrop ..... English
B.A., M.A., Austin College.

Mary Yeager Wallace ..... Director of Counseling and Guidance
B.A., Hardin-Simmons University; M.A., The University of Texas.

Homer Jerome Walsh ..... French, Spanish
B.A., Mexico City College.

James David Wicks ..... Chemistry
B.S., M.A., Southwest Texas State College.

Mabel Williams ..... Mathematics
B.A., The University of Texas; M.A., The University of Texas.

Sarah Willis ..... Spanish
B.A., East Texas State College.

THE HISTORY AND DEVELOPMENT OF TYLER JUNIOR COLLEGE

The original Tyler Junior College was established in 1926 as a part of the Tyler Public School System. It operated under this plan with a small enrollment until September 1, 1946.

On November 13, 1945, the voters established a new, independent Tyler Junior College District, authorized a tax levy for the support of the college, and authorized a bond issue for the erection of a new college plant on its own campus, separating it from the public school system on September 1, 1946.

Since then the Tyler Junior College District has been enlarged and extended by eight neighboring school districts which voted to become a part of the College District for junior college purposes only. The present Tyler Junior College District is now composed of the following districts:

The Tyler Independent School District.
The Winona Consolidated Rural High School District No. 67.
The Chapel Hill Independent School District.
The Lindale Independent School District.
The Rice Consolidated Common School District No. 13.
The Dixie Rural High School District No. 5.
The Swan Consolidated Common School District No. 60.
The Pine Springs Common School District No. 48.
Flint Common School District No. 18.

The College is operated under statutory authority by its Board of Trustees, composed of ten members. Its enrollment has increased from less than 200 students to an annual head count of more than 3,000 students in all divisions. Students residing in the Tyler Junior College District are entitled to priority in enrollment. Others are admitted if facilities are available, but the College reserves the right to limit the enrollment of students residing outside the Tyler Junior College District whenever in its judgment facilities are not available for additional students.

GENERAL INFORMATION

Objectives of the College. The curricula are intended to meet the needs of students who expect to take four years of college work, of those who intend to enter professional schools, and those who are preparing to begin life's work after completing a year or more in college. An important function of the Tyler Junior College is an adult education program to meet the needs of the area.

Accrediting. The Tyler Junior College is a member of the Association of Colleges and Secondary Schools for the Southern States, the Texas Association of Colleges and Universities, and the Texas Association of Music Schools.

Membership in these accrediting associations makes possible the transfer of credit for work done in Tyler Junior College to other colleges and universities.

Since colleges differ in their curricula, a student should secure the catalogue of the institution to which he intends to transfer credit. Courses for his first two years should be planned in accordance with the degree plan of the institution to which he will transfer.

Admission. Registration for the fall semester begins in June and continues daily throughout the summer. By this system the student is assured of thorough and leisurely counseling on available degree plans.

Students will avoid delay in registering by sending a transcript of credits from the high school or college last attended.

1. Admission by Graduation from High School.
   Graduation from a standard high school with at least fifteen units of high school credit, including three units in English, is required. The elective units must be chosen from the list approved by the Texas Education Agency.

2. Admission by Examination.
   Students who are not graduates of a high school may absolve the deficiency by taking examinations.

3. A limited number of special adult students are admitted to evening classes upon individual approval.

Attendance. Regular class attendance is fundamental for the success of the student; therefore, a student must report promptly and regularly to all classes. Excessive absence is cause for dropping the student from the rolls.

Guidance and Counseling. The college offers an extensive program in testing, guidance and counseling, under the supervision of the Director of Guidance and Counseling. All beginning freshmen are required to take a series of standardized tests which serve as a basis for future counseling.

Grades and Reports. Students or parents receive grade reports every nine weeks. The standing of the student in each course is determined by his daily performance and by regular examinations. Two hours is considered a reasonable amount of time for average students to spend in preparation for each hour of class work.

Students' grades may be interpreted as follows:

A Excellent
B Good
C Average
D Poor
E Conditional*
F Failure
I Incomplete**
X Official drop while passing
XF Official drop while failing
Q Unofficial drop
W Official withdrawal from college while passing
WF Official withdrawal from college while failing

* A student making E will be permitted to remove the condition by a second examination within a semester.

** An incomplete must be made up within the following semester. After this time it is changed to F.

Graduation, Degrees and Certificates

The college awards the Associate degree in the fields of liberal arts, business administration, engineering, and science to those who complete the requirements as set forth for the particular degree desired and who make proper application to the Registrar for that degree.

Associate in Arts Degree. Students who complete specified liberal arts or pre-professional requirements for graduation receive the Associate in Arts Degree. Students must complete sixty semester hours of work (exclusive of physical training) with an average grade of at least C.

The sixty semester hours should include twelve hours in English, six in United States History, six in government, and at least fifteen hours of sophomore rank; however, the degree will be granted to any student completing any required sixty hours

of a baccalaureate degree plan, provided Government 213-223, United States History 213-223, and the required physical training, are included and the general average is at least C.

At least fifteen semester hours must be completed at Tyler Junior College.

Students who graduate are required to attend the commencement exercises unless excused.

Associate in Business Administration Degree. The degree of Associate in Business Administration is conferred upon students who complete a minimum of sixty semester hours (exclusive of physical training and freshman orientation), combining liberal arts with a concentration of secretarial and business administration courses, provided a minimum of a "C" average is maintained and six hours each are completed in English, United States History and Government. Two years of physical training are required.

Associate in Applied Engineering Degree. The degree of Associate in Applied Engineering is conferred upon students who complete, with a minimum of "C" average, a total of sixty hours (exclusive of physical training and freshman orientation) in required concentrations in technological fields such as Electronics, Surveying, Drafting or Petroleum Technology and provided six hours each are completed in English, United States History and Government. Two years of physical training are required.

Associate in Science Degree. The degree of Associate in Science is conferred upon students who complete a minimum of sixty hours (exclusive of physical training and freshman oritentation), combining liberal arts with certain technical courses. An average of at least C must be attained. Government 213-223, six hours of United States History and six hours of English must be completed. Two years of physical training are required.

The degree is granted in nursing arts.

Proficiency Certificates. Students who satisfactorily complete certain courses of a vocational nature or those who satisfactorily complete technological courses without taking liberal arts courses for a degree are awarded certificates of proficiency.

Physical Education Requirement. Participation in physical education activity is required of all students in Tyler Junior College. Exceptions are recognized in those presenting a physician's statement against such participation, those presenting evidence

of one year or more in the armed services of the United States, married women, or students over 25 years of age.

Substitution of participation in the Apache Band or Belles or intercollegiate athletic squad training during the season of the sport is allowed.

Psychology 110 Requirement. All beginning freshmen are required to enroll in and attend the college orientation course Psychology 110.

Buildings and Facilities

The Tyler Junior College occupies its own 65-acre campus upon which twelve modern buildings primarily of colonial architecture have been erected since 1948 as follows:

The Main Building. Many of the academic classes are held in this building and in it also are located the business offices, the library, laboratories, and various special rooms.

The Academic Building. Completed in 1963, this modern building includes offices, classrooms, laboratories and special facilities.

The Wise Auditorium - Fine Arts Building. This building, erected from the proceeds of a bond issue and a substantial gift from the Hon. Watson W. Wise, includes an auditorium of surpassing beauty, in addition to special rooms for music, art, drama, and speech arts.

The Technology Building. This building includes special classrooms and laboratories for instruction in petroleum technology, electronics, surveying and drafting.

The Student Center Building. The College Bookstore, Snack Bar, student recreational facilities, and College Dining Hall are housed in this building.

Gentry Gymnasium. This is a modern gymnasium for women.
The Men's Gymnasium. Completed in 1963, this building provides modern facilities for a thorough program in physical fitness and for athletic activities as well as general programs. It has a seating capacity of 3000.

The Hudnall Planetarium. This building houses the largest planetarium in Texas as well as special facilities for space education.

DORMITORIES

Four modern air-conditioned dormitories, one for women and three for men, are maintained as follows:

Lillye Mae Vaughn Hall. This residence hall was erected in 1958 and furnished through the generosity of Dr. and Mrs. Edgar H. Vaughn. It accommodates 48 women.

East Hall. 40 men are accommodated in this dormitory.

Center Hall. Facilities for 48 men are provided.

West Hall. Facilities for 48 men are provided.

Note—Non-resident or non-commuting students must reside in college dormitories or college approved houses. No apartments are permitted except to married couples.

Numbering of Courses

One semester hour represents one class hour per week for four and a half months; for example, one course meeting three hours a week for nine months carries credit of six semester hours.

Courses are numbered as follows (except in nursing): The first digit of the number indicates the college year in which the course is taken; the second digit in the number indicates the semester of the year in which the course is taken; the final digit indicates the credit value of the course in semester hours; thus, English 123 indicates that the course is the first year, second semester English with a credit value of three semester hours. The addition of a lower case letter indicates that the course is taught in two or more divisions. The letter S indicates a summer school six weeks course.

All descriptive titles of courses are followed by two numbers in parenthesis. The first of these numbers gives the number of class meetings each week while the second number gives the number of hours of laboratory each week. For example, the notation (3-2) indicates that a course has three class meetings and two hours of laboratory weekly.

Transfer to Other Institutions. Since colleges differ in their curricula, a student should secure the catalogue of the institution to which he intends to transfer credit. Courses for his first two years should be planned in accordance with the degree plan of the institution to which he will transfer.

Library. An excellent reference library consisting of more than 20,000 volumes is housed in the main college building. Here the college also maintains audio facilities whereby the student may listen to musical, dramatic, and literary recordings.

Evening Division. A regular schedule of evening classes has been arranged, meeting from 7:00 p.m. until 10:00 p.m.

Any adult interested is invited to call the Registrar, Phone LY 4-4281, or the Dean of the Evening Division, Phone LY 2-6761, for further information.

Student Load. Except by special permission from the Dean, a student will not be permitted to register for fewer than four or more than five courses.

Student Housing

Reservations. Students wishing to make dormitory reservations should write to the Dormitory Director, Tyler Junior College, requesting an official application blank for this purpose. It must be accompanied by a deposit of $30.00.

Students will be notified by mail of the date upon which they should arrive and the supplies which they should buy.

Dining Hall. Students living on the campus take their meals in the College Dining Hall.

Dormitories. The college maintains three modern air-conditioned dormitories for men and one for women.

Charges. Room, board and supervision are at the rate of $315 per semester. Students who make dormitory reservations are expected to maintain dormitory residence at least until the end of the semester.

Board and room payments are due in full at the beginning of each semester and they cover the period beginning September 7, 1964 through May 28, 1965.

Students wishing to pay the semester charge by the month may do so at the rate of $70.00 per month payable on or before the 5th of each month.

Dormitory Holidays and Dining Hall Holidays

Thanksgiving Holidays. All dormitories will close November 25, 1964. They will reopen Sunday, November 29, 1964.

The dining hall will close following the evening meal November 25, 1964. It will reopen for breakfast Monday, November 30, 1964.

Christmas Holidays. The dormitory will close Friday, December 18, 1964. They will reopen Sunday, January 3, 1965.

The dining hall will close following the evening meal Friday, December 18, 1964. It will reopen for breakfast Monday, January 4, 1965.

Easter Holidays. The dormitories will close Thursday, April 15, 1965. They will reopen Monday, April 19, 1965.

The dining hall will close following the evening meal Thursday, April 15, 1965. It will reopen for breakfast Tuesday, April 20, 1965.

Tuition and Fees

Tuition rates in Tyler Junior College are low, since the college is partially supported by the State of Texas. Tuition is due in full at the beginning of the semester. Any other plan must be by special arrangement with the Business Manager. An additional fee of $5.00 is charged for late registration—enrollment after the regularly scheduled registration days.

All tuition and fee charges are subject to change by the Texas State Legislature.

Tuition per semester is as follows:

Residents of the TJC District:	**Tuition per semester**
For three or more subjects	$60.00
For two subjects	40.00
For one subject	20.00

Non-Residents of the TJC District:	**Tuition per semester**
For three or more subjects	$90.00
For two subjects	70.00
For one subject	35.00

The tuition rate charged non-resident students is subject to increase without prior notice.

Tuition rates for Evening Division courses for all residents of the State of Texas are the rates specified for residents of the Tyler Junior College District.

Technical, vocational and terminal courses—see special announcements of these courses for rates. Page 59.

Statutory Fees. In accordance with the requirements of the statutes of the State of Texas all students in certain laboratory courses are charged an appropriate fee.

Music Fees Per Semester—Individual Lessons

	Regular Students Who Enroll for 12 Sem. Hours or More		Special Students Who Enroll for Music Only	
	One 30-min. Lesson Per Week	Two 30-min. Lessons Per Week	One 30-min. Lesson Per Week	Two 30-min. Lessons Per Week
Piano	$54.00	$75.00	$72.00*	$126.00*
Voice	54.00	75.00	72.00*	126.00*
Violin, Violoncello	54.00	75.00	72.00*	126.00*
Harp	54.00	75.00	72.00*	126.00*
Organ	54.00	75.00	72.00*	126.00*
Clarinet	54.00	75.00	72.00*	126.00*

Piano Pedagogy (one two hour session per week) $30.00
Voice Diction (one hour per week) 18.00
Practice Room (four hours per week) 4.00

* Includes $17.50 tuition plus special music fee.

Graduation Fees. A fee of $7.00 is paid by students at the time of graduation.

Non-Resident Tuition. Students whose residence is outside the State of Texas, and who are thereby classified as non-resident students according to the definition provided by House Bill 507 (enacted by the Fiftieth Legislature of the State of Texas,) are charged a non-resident tuition of $200.00 per semester for a full student load of twelve hours or more in accordance with the provisions of House Bill 507. The non-resident fee is subject to change without notice.

For less than twelve semester hours the non-resident rate is $25.00 per semester hour, with a minimum of $25.00.

Refund Policy. No refund of tuition will be made except for withdrawals effected during the first two weeks of the regular semester. Qualified applicants will be subject to a 20 per cent tuition charge. To qualify for the refund the applicant must have withdrawn by completing proper forms in the Registrar's office.

Student Aids, Awards, Loans and Scholarships

The Honor Graduate Scholarship. The highest honor graduate of any affiliated high school is given a scholarship covering his tuition. This scholarship must be used within one year from the date of graduation.

The A.A.U.W. Women's Graduate Scholarship. The Tyler Branch of the American Association of University Women has established an annual scholarship of $100 to be awarded to a woman graduate. The scholarship is awarded on the basis of scholarship,

character, and need and is to be used for tuition and fees at the senior institution chosen by the student. The grantee is chosen by a scholarship committee of the A.A.U.W. from a list of three nominees by the college.

Art Merit Award. The Junior League of Tyler has established a $25.00 annual award to be granted to the student showing the greatest achievement in the field of art.

The Epsilon Sigma Alpha Scholarship. The Epsilon Sigma Alpha Sorority, through the Iota Omega Chapter of Tyler, provides a women's scholarship of $75.00 based upon ability and need.

Alpha Delta Kappa Scholarship. The Tyler Teachers Honorary Sorority Alpha Delta Kappa has established an annual tuition scholarship for a student who plans to become a teacher. The scholarship is granted on the basis of ability and prospective success in the field.

The Crusaders Scholarship. The Crusaders Class of the Marvin Methodist Church awards an annual scholarship in the amount of $125 to a worthy and needy student.

The Coterie Club. The Coterie Club, composed of musicians and music lovers, has established a scholarship which is awarded annually to a student who shows outstanding talent in music.

The Wilton Fair Endowment. Mr. and Mrs. Wilton Fair have established an endowment which is used each year for scholarships and similar purposes.

This endowment consists of the revenue from certain valuable oil properties deeded to the college. Mr. Fair, a former member of the Board of Trustees of Tyler Junior College and one of its most active supporters, and Mrs. Fair established this fund in 1952.

The Pirtle Scholarship in Science and Engineering. Through the generosity of Mr .and Mrs. George Pirtle an annual scholarship of five hundred dollars is bestowed upon a graduating student majoring in engineering or a physical science.

The Texas Society of Professional Engineers Scholarship in Mathematics, Science or Engineering. The Texas Society of Professional Engineers has established a five hundred dollar scholarship made to a graduating Tyler Junior College man or woman who plans to continue study leading to a degree in engineering, chemistry, geology, physics, or mathematics.

The scholarship is awarded on a competitive basis determined by scholarship, character, and need.

Opti-Mrs. Club Scholarship. The Opti-Mrs. Club, composed of the wives of the various Optimist Club members of Tyler, has established a $120 tuition scholarship for a sophomore student based upon ability and need. The student chosen must be a resident of the Tyler Junior College District.

The Mary Wallace Education Scholarship. Mr. Emmitt Williams, a former student, has established a $120 annual scholarship for a second year student preparing for the teaching profession. The recipient must be of good character, pleasing personality, hold at least a B average in two semesters work and need scholarship aid.

The En Avant Club. The En Avant Club, a group of civic-minded young ladies, annually provides a scholarship to some young woman.

The Barbee-Chapel Hill High School Scholarship. Through the generosity of Mr. Wallace Barbee, an ex-student of Tyler Junior College, an annual tuition scholarship has been set up to be awarded to the Chapel Hill High School senior voted the most likely to succeed.

The Swanson Award. A prize of $100 is awarded by former Representative F. G. Swanson for an essay contest concerning a subject in the field of government.

John Tyler Parent-Teacher Association Work Scholarship. A John Tyler graduate whose parent has been a member of the Parent-Teacher Association is eligible for the John Tyler Parent-Teacher Association Work Scholarship on the basis of ability and need.

The recipient is eligible to receive $100 per year for the two-year Junior College period. In return the recipient will perform some assigned service for the College at the rate of $1 per hour. Application may be made through the High School Counselor.

The Optimist Club Oratorical Scholarship. The Optimist Club of Tyler has established a $100 scholarship in Tyler Junior College for the winner of the annual oratorical contest.

The Vaughn Foundation Loan Fund. Through the Vaughn Foundation, Dr. Edgar H. Vaughn, a public spirited friend of Tyler Junior College, has set up a student loan fund. Any worthy full-time student approved by the faculty scholarship committee is eligible for a loan free of interest until graduation in his chosen field.

The T. B. Butler Journalism Key. The T. B. Butler Publishing Company of Tyler annually presents a gold key to the outstanding Journalism student of the college.

Journalism Ex-Students Award. The Journalism Ex-Students Association annually awards a cash scholarship to an outstanding student majoring in Journalism.

Chitwood Loan Fund. Through the generosity of Mr. W. Roy Chitwood a loan fund for deserving students has been established. A low rate of interest is charged and loans repaid are returned to the loan fund for the use of other students.

The Watson W. Wise Incentive Award. An endowment fund established by the Honorable Watson W. Wise, President of the Board of Trustees of the college, who has made many generous gifts to the college, provides an annual sum for a beautiful trophy cup awarded to the student chosen by a faculty committee as best exemplifying the virtues of industry, scholarship, and student activity.

The Henry King Kiwanis Scholarship. Through the generosity of Mr. Henry King, the Tyler Kiwanis Club annually provides a scholarship of up to one hundred fifty dollars. It is granted to a Smith County young man on the basis of ability and need.

The D.A.R. Scholarship. The Mary Tyler Chapter of the Daughters of American Revolution awards a $100 scholarship annually to an outstanding woman student.

The Century Scholarship. The Century Class of ladies of the Marvin Methodist Church awards $120 annually to a local girl on the basis of character, ability and need.

Sales Executive And Management Club Forensics-Drama Scholarship. The Tyler Sales Executive and Management Club has established one or more scholarships for talented, deserving students entering college who intend to participate in forensics or drama events. These are awarded through the chairman of the Forensics and Drama Department.

Smith County Bar Association Scholarship. The Smith County Bar Association has established an annual scholarship of $150 which is granted to a student completing his freshman year and planning to major in History, Government or Economics or to one registered in a pre-law program of any kind.

The award is deposited with Tyler Junior College for the student's expenses in his second year. Outstanding scholarship and participation in extra-curricular activities are the basic qualifications upon which the choice is made. Need of the student is a secondary qualification.

The Tyler City Council of Parents and Teachers Scholarship. The

Tyler City Council of Parents and Teachers has established an annual scholarship not to exceed $200 or as much of that amount as is required for tuition, books, fees, etc.

The scholarship is granted to an outstanding and deserving boy or girl graduate of Robert E. Lee or John Tyler High School. Application for the scholarship may be made to the Counselor of the high schools, any member of the Scholarship Committee, or any of the Local Unit Presidents.

KLTV Television Scholarship. Tyler Television Station KLTV has established a cash scholarship of $780 for an outstanding journalism major of the beginning of the sophomore year. The purpose of the scholarship is to encourage bright young journalists in television. Eligibility for the award is determined upon recommendation of the college journalism department and a short trial period in the KLTV newsroom. The recipient has an additional opportunity for a part-time apprenticeship at the station.

John Ben Sheppard Scholarship. The Texas Law Enforcement Foundation created the John Ben Sheppard Scholarship Fund to provide college educations for children of Texas law enforcement officials killed in performance of duty.

The fund makes college scholarships available for children of law enforcement officers on any level of jurisdiction killed in the performance of duty. Amount of a grant depends on the need of the student.

A Scholarship Committee composed of members of the board of directors of the Texas Law Enforcement Foundation will consider the following points in screening qualified scholarship applicants:

(1) Aptitude for college work, (2) Desire for college training, (3) Financial need.

Texas Law Enforcement Foundation Scholarships. The Texas Law Enforcement Foundation makes available scholarships for sons and daughters of deceased law enforcement officials. Application blanks for this or the John Ben Sheppard Scholarship may be obtained from the Foundation Office, 3914 Seminole, Houston 27, Texas.

National Defense Student Loans. Under the provisions of the National Defense Education Act of 1958 qualified students may borrow funds to further their college education. To qualify, a student must be in need of the amount of the loan and must, in the opinion of his institution, be capable of maintaining good standing in his chosen courses of study.

Veteran Dependency Scholarships. The Federal Government has set up provisions in Public Law 634 whereby certain veteran dependents may be eligible for a subsidy while pursuing their education. Orphans of service personnel and dependents of veterans with service connected disability may find themselves eligible.

Vocational Rehabilitation Assistance. The State Board of Vocational Education, through the Vocational Rehabilitation Division offers assistance for tuition to students who have physical disabilities, provided the vocational objective selected by the disabled person has been approved by a representative of the Division. Application for Vocational Rehabilitation assistance should be made to the Rehabilitation office, Box 2034, Longview, Texas, or to the Director of Vocational Rehabilitation, Texas Education Agency, Austin, Texas.

Student Activities

The Tyler Junior College provides various types of student activities which furnish training in leadership, afford opportunities for diversion, and serve as a means of student development. Among these activities are the following:

The Apache. The Apache is the college yearbook. It is an outstanding publication edited and published by a student staff.

The Apache Band. The famous Apache Band is the official college band, open to all qualified students.

The Pow-Wow. The Pow-Wow, the official college newspaper, is prepared and managed by a student staff under the direction of faculty sponsors. Students act as reporters, editors, and business managers of this publication. The paper is furnished free to students.

For nine consecutive times the Apache Pow-Wow has won the highest award given by the Associated Collegiate Press. This award, The All American Honor Rating, is given in recognition of merit to a limited number of junior colleges annually.

The Apache Belles. The internationally famous Apache Belles is a uniformed women's organization which presents skilled group performances and routines at football games, and on other occasions.

Throughout the year special study is given to good taste in clothing, make-up, manners and general personal improvement.

The Apache Guard Association. A service organization of college men dedicated to the development of college spirit and good sportsmanship. The association sponsors worthwhile projects.

Athletics and Physical Training. The college schedules intercollegiate games in football and basketball. A complete physical education program provides opportunity for participation by both men and women in numerous sports.

The Atta Kula Kula. This traditional organization of the women of the college provides a general program of recreation, entertainment, instruction and social activity for all women interested in membership. For the past twelve years Mr. and Mrs. D. K. Caldwell have provided a dinner for all members of the organization.

The Singing Apaches. The Singing Apaches is a choral society open to capable students interested in vocal music.

The Engineers' Club. This club is composed of students interested in all fields of engineering. Various field trips are taken to indicate the future possibilities of the different branches of the engineering profession.

Sigma Sigma. This organization consists of students preparing to enter the business vocations, such as secretarial and clerical. It provides helpful guidance to the members of the club, as well as pleasant social activities.

Student Education Association. The Student Education Association has as its purpose the promotion of a better understanding of the teaching profession. Its membership is composed of those whose objective is to enter the profession.

Las Mascaras Dramatic and Forensics Club. Las Mascaras fosters an interest in all phases of forensic and dramatic art. Any student in Tyler Junior College who is interested in them is eligible for membership. Las Mascaras sponsors major dramatic productions and forensic competitions each year.

Phi Theta Kappa. The Alpha Omicron Chapter of Phi Theta Kappa, the national Junior College scholastic fraternity, is composed of members selected on the basis of scholarship, character, leadership and service. Its membership is restricted to ten percent of the students enrolled in the Tyler Junior College, and the faculty and local chapter name as members those students meriting special honor.

The Student Senate. The Student Senate is the official organization for student government.

Social Activities. The social activities of the college include parties, dances, feature movies and other social affairs under the direction and management of the Student Council and a faculty committee headed by the Director of Student Activities.

SUGGESTED COURSES OF STUDY FOR FRESHMEN

The following plans are a few of the most popular fields and do not indicate that others cannot be taken. College officials will work out degree programs in any desired field.

Since college plans differ, the student should check his course by the catalogue of the college to which he intends to transfer or request the Registrar or Dean to assist him in doing so.

All students are required to take Physical Education unless excused for proper reason.

Agriculture. (Texas A. & M. Plan. Special course plans for other institutions will be arranged.)

SUBJECT	CREDIT
English	6 semester hours
Chemistry	8 semester hours
Algebra	3 semester hours
Biology 124 B	4 semester hours
Agriculture	6 semester hours
United States History	6 semester hours
Psychology 110	
Physical Training	

Bachelor of Arts or Bachelor of Science Degree.

English	6 semester hours
Mathematics	6 semester hours
United States History	6 semester hours
Natural Science	6 or 8 semester hours
Foreign Language	8 semester hours
Psychology 110	
Physical Training	

Bachelor of Business Administration. (General Plan)

Mathematics	6 semester hours
English	6 semester hours
Natural Science	6 or 8 semester hours
Speech	3 semester hours
United States History	6 semester hours
Typewriting (non-credit)	0 semester hours
Elective	3 semester hours
Psychology 110	
Physical Training	

Dentistry.

English ..... 6 semester hours
Chemistry ..... 8 semester hours
Biology ..... 8 semester hours
United States History ..... 6 semester hours
Elective ..... 3 semester hours
Psychology 110
Physical Training

Elementary Education Major.

English ..... 6 semester hours
Mathematics or Foreign Language.....6 or 8 semester hours
United States History ..... 6 semester hours
General Biology ..... 8 semester hours
Music or Art ..... 6 semester hours
Psychology 110
Physical Training

Secondary Education Major. The plan is the same as the above except music or art is not required unless the student plans to major in one of these fields. Others should substitute subjects in the chosen major fields for music or art.

Engineering.*

English ..... 6 semester hours
Chemistry ..... 8 semester hours
Engineering Drawing..... 2 semester hours
Descriptive Geometry .....2 semester hours
Analytic Geometry ..... 3 semester hours
Calculus ..... 6 semester hours
Engineering Mechanics ..... 3 semester hours
American History ..... 3 semester hours
Psychology 110
Physical Training

---

*Note—New engineering plans call for Algebra and Trigonometry to be taken prior to admission to the program. It is recommended that, if needed, these be taken in summer school. Any deficiency from high school may be made-up in college, but the normal schedule is reduced to that extent.

Forestry.

English ..... 6 semester hours
Algebra ..... 3 semester hours
Biology ..... 8 semester hours
Trigonometry ..... 3 semester hours
Engineering Drawing ..... 3 semester hours
Descriptive Geometry ..... 3 semester hours
United States History ..... 6 semester hours
Psychology 110
Physical Training

Geology.

English ..... 6 semester hours
Chemistry ..... 8 semester hours
Trigonometry ..... 3 semester hours
Algebra ..... 3 semester hours
Analytic Geometry ..... 3 semester hours
Geology ..... 8 semester hours
Psychology 110
Physical Training

Home Economics.

English ..... 6 semester hours
Chemistry ..... 6 or 8 semester hours
Home Economics .....6 or 9 semester hours
Electives ..... 6 semester hours
United States History ..... 6 semester hours
Psychology 110
Physical Training

Law.

United States History ..... 6 semester hours
English ..... 6 semester hours
Natural Science ..... 8 semester hours
Mathematics ..... 6 semester hours
Public Speaking ..... 6 semester hours
Psychology 110

Typewriting (non-credit, if taking the Business Administration Plan) ..... 0 semester hours
Physical Training

Medicine. (Associate Degree Plan)

English ..... 6 semester hours
Chemistry ..... 8 semester hours
Algebra ..... 3 semester hours
Foreign Language ..... 8 semester hours
United States History ..... 3 semester hours
Biology ..... 8 semester hours
Psychology 110
Physical Training

Professional Nursing. The Tyler Junior College cooperates with the Texas Eastern School of Nursing by teaching under contract the first two nine-month academic years of the required three-year course of study leading to eligibility to take the State examinations for registration as a professional nurse with the title of R. N.

After the required course in Tyler Junior College, the student completes the summers and third year in the Texas Eastern School of Nursing, an independent, incorporated State-approved nursing school in Tyler.

The following is the curriculum for the first two academic years as taught in Tyler Junior College:

First Year — First Semester.

English 113 ..... 3 semester hours
Biology 113B ..... 3 semester hours
Chemistry 113 ..... 3 semester hours
Biology 114A ..... 3 semester hours
Nursing 113 ..... 3 semester hours
Nursing 112 ..... 2 semester hours

First Year — Second Semester.

Biology 123B ..... 3 semester hours
Nursing 123 ..... 3 semester hours
Chemistry 123 ..... 3 semester hours
Pharmacology 113 ..... 3 semester hours
Home Economics 123C ..... 3 semester hours
Nursing 121 ..... 1 semester hour
Nursing 111 ..... 1 semester hour

First Year — Summer Term.

Nursing 212S ..... 3 semester hours
Nursing 112AS ..... 2 semester hours
Nursing 112S ..... 2 semester hours

Second Year — First Semester.

English 123 ..... 3 semester hours
Nursing 215* ..... 5 semester hours
Nursing 214* ..... 4 semester hours
Nursing 223 ..... 3 semester hours
Nursing 223E** ..... 3 semester hours
Psychology 213 ..... 3 semester hours

Second Year — Second Semester

Sociology 213 ..... 3 semester hours
Psychology 223A ..... 3 semester hours

Pre-Nursing Baccalaureate Degree Plan—Freshman Year.

English ..... 6 semester hours
United States History ..... 6 semester hours
Biology ..... 8 semester hours
Psychology ..... 3 semester hours
Chemistry ..... 6 semester hours
Sociology ..... 3 semester hours
Psychology 110
Physical Training

Optometry.

English ..... 6 semester hours
Physics ..... 8 semester hours
Chemistry ..... 8 semester hours
Biology ..... 8 semester hours
Mathematics ..... 6 semester hours
Psychology 110
Physical Training

Pharmacy.

English ..... 6 semester hours
Biology ..... 8 semester hours
Physics ..... 8 semester hours
Chemistry ..... 8 semester hours
United States History ..... 6 semester hours
Psychology 110
Physical Training

*Three-fourths of the class take the course the first semester. Remaining fourth of class takes the course the second semester.

**One fourth of the class takes the course the first semester. The remainder take the course the following semester.

Journalism

English ..... 6 semester hours
Natural Science ..... 6 or 8 semester hours
Foreign Language ..... 8 semester hours
Mathematics ..... 3 semester hours
Journalism ..... 3 semester hours
United States History ..... 6 semester hours
Psychology 110
Physical Training

One Year Business and Commercial Courses. For business students interested in an intensive business course, the Certificate of Proficiency is awarded either in secretarial science, office management, or general business, upon completion of 30 semester hours of work. These courses are planned to train the student for work in an office. All courses listed under the suggested plan are required.

Secretarial Course

English 113 ..... 3 semester hours
Shorthand 114S-124S ..... 8 semester hours
Typewriting 113T-123T ..... 6 semester hours
Secretarial Practice 113F-123F ..... 6 semester hours
Office Machines 113M ..... 3 semester hours
Business Correspondence 113C ..... 3 semester hours
Business Mathematics 113D or
Secretarial Accounting 123 ..... 3 semester hours
Psychology 110
Physical Training

General Business Course

English 113 ..... 3 semester hours
Typewriting 113T-123T ..... 6 semester hours
Shorthand 114S-124S ..... 8 semester hours
Secretarial Practice 113F-123F ..... 6 semester hours
Office Machines 113M ..... 3 semester hours
Elective (Business or related courses) ..... 6 semester hours
Psychology 110
Physical Training

Electronic Data Processing

English 113-123 or 223B ..... 6 semester hours
Introduction to Business 113B ..... 3 semester hours
Mathematics 113F ..... 3 semester hours
Accounting 214 ..... 8 semester hours
Business Machines 113M ..... 3 semester hours

Electronic Data Processing 113-123 ..... 6 semester hours
Speech 113A ..... 3 semester hours
Psychology 110
Physical Training

Suggested Associate in Business Administration Degree Plan.

Secretarial Plan — Freshman Year

English 113-123 or 223B ..... 6 semester hours
Shorthand 114S-124S ..... 8 semester hours
Typewriting 113T-123T* ..... 6 semester hours
Secretarial Practice 113F-123F ..... 6 semester hours
History 213-223 ..... 6 semester hours
Psychology 110
Physical Training

Secretarial Plan — Sophomore Year

Shorthand 214S-224S ..... 8 semester hours
Typewriting 213T-223T (or an elective) ..... 6 semester hours
Accounting 214-224 ..... 8 semester hours
Business Correspondence 113C ..... 3 semester hours
Office Machines 113M ..... 3 semester hours
Government 213-223 ..... 6 semester hours
Physical Training

General Business Plan — Freshman Year

English 113-123 or 223B ..... 6 semester hours
Shorthand 114S-124S ..... 8 semester hours
Typewriting 113T-123T ..... 6 semester hours
Secretarial Practice 113F-123F ..... 6 semester hours
History 213-223 ..... 6 semester hours
Psychology 110
Physical Training

General Business Plan — Sophomore Year

Accounting 214-224 ..... 8 semester hours
Business Correspondence 113C ..... 3 semester hours
Business Law 213L ..... 3 semester hours
Government 213-223 ..... 6 semester hours
Economics 213 ..... 3 semester hours
Speech 113A ..... 3 semester hours
Business Mathematics 113D ..... 3 semester hours
Office Machine 113M ..... 3 semester hours
Physical Training

*Students beginning Typewriting—others take Typewriting 213-223.

Description of Courses

For a description of the system of numbering of courses, see page 18 of this catalogue.

Agriculture Courses with the Asterisk are offered in 1964-65.

***Agriculture 113 — General Animal Husbandry (2-2)** An introductory survey course intended to acquaint the student with the importance of livestock and livestock farming. General factors influencing efficiency in feeding, market value, breeding, health and adaptability of various species to geographical and climatic regions are studied. The course is designed to develop in the student an appreciation of improved livestock. Selecting and judging the various breeds and market classes are stressed in laboratory.

***Agriculture 114A — General Entomology (3-2)** The systematic study of the principal orders of insects; the relation of the anatomy of the insect to control measures; the life histories of the more common insects; methods of control for injurious forms.

Agriculture 113B — Dairying (2-2) Dairying in its relation to agriculture and community development; branches of dairy industry and conditions affecting their development; the place of dairying on the farm; composition and food value of milk and its products; the production and handling of clean milk on the farm.

Agriculture 113C—Poultry Production (2-2) The breeds and types of poultry, culling, poultry for egg production, incubation, brooding and feeding for growth and egg production, winter and summer management, housing and hygiene, preparing poultry for market, methods of marketing; practical application of these subjects to general farm conditions. The practice consists of the identification of breeds and varieties, judging, poultry for egg production, plans for poultry farms and poultry houses, identification of feeds.

***Agriculture 123 — Fundamentals of Crop Production (2-2)** Classification and distribution of farm crops; importance of good varieties and good seed; crop improvement; preparation of the seed bed, commercial fertilizers, manures and lime; seeding practices; crop tillage; harvesting; meadow and pasture management; weeds; crop rotation; diseases and insect enemies.

***Agriculture 123D — Wildlife Management (3-0)** A course designed to acquaint the student with the wildlife resources of the United States with special reference to Texas. Emphasis is placed on the inter-relationship of plants and animals in our environment with plans and methods for rehabilitation, maintenance and increase of the desirable species.

Agricultural 123B — Horticulture (2-3) A general study of horticulture; the growth and fruiting habits of horitculture plants; a study of the principles and practices of propagating vegetables, fruits and ornamentals, including the methods of handling seed, cuttage, layerage, grafting, budding and bulbs; a study of the planting, fertilization, care, culture, harvesting, handling and utilization of fruit and vegetable crops. Prerequisite: Biology 114B or taken concurrently.

Agriculture 123C — Marketing of Agriculture Products (3-0) A study of the general principles, practices, and problems involved in marketing farm products.

Art

Art 113 — Creative Design (2-4) Fundamental experience with various materials; emphasis upon the development of an awareness of the factors of visual expression, color, form and design.

Art 113A — Home Planning and Furnishing (Interior Decoration) (3-0) This course includes a study of floor plans in relation to the work units and furnishings of the home and the selection and placing of furnishings suited to the modern home.

Art 113B — Theory and Practice of Design (2-4) A basic course in the fundamentals of color and form with emphasis on oils.

Art 113C — Freehand Drawing (3-3) A course designed to acquaint the student with the principles of freehand drawing with special emphasis on life drawing in charcoal and other media.

Art 123 — Creative Design (2-4) A basic course in the fundamentals of color and drawing in design.

Art 123B — Theory and Practice of Design (2-4) A continuation of Art 113B with emphasis upon still life and the human figure.

Art 123C — Freehand Drawing (3-3) A continuation of Art 113C. Prerequisite Art 113C.

Art 114B — Elementary Design (2-4) Materials, techniques and media for Creative Art at the elementary level. May not be counted by art majors.

Art 124B — Elementary Design (2-4) A continuation of Art 114B. May not be counted by art majors.

Bible

(By affiliation with the Baptist Chair of Bible, the Bible Chair of Texas Methodist Student Movement, The Fifth Street Presbyterian Bible Chair, and the Church of Christ Bible Chair.) (A maximum of twelve semester hours will be accepted toward a degree.)

Bible 113 — Old Testament Survey (3-0) A study of all the books of the Old Testament giving attention to the historical setting, the message, and the place of each book in its relation to the Bible as a whole.

Bible 123 — New Testament Survey (3-0) A study of all the books of the New Testament as to author, message, and relation to the entire Bible.

Bible 213 — Life and Teachings of Jesus (3-0) A study of the life of Jesus and His teachings as applied to present-day life.

Bible 223 — Life and Teachings of Paul (3-0) A study of the life and teachings of Paul and their part in the early spread of Christianity.

Biology

Biology 114 — Animal Biology (3-3) A brief study of the nature of protoplasm and the structure and function of cells is followed by a systematic survey of the animal kingdom, with emphasis on such forms as are of human interest or application. There follows a study of adaptations in selected types as a basis for a consideration of the origin of species and the principles of organic evolution. This course may be followed, or preceded, by Biology 124B by students desiring a year of general biology; it should be followed, or preceded, by Biology 124 by those desiring general zoology.

Biology 124 — Animal Biology (3-3) A study of organ systems of vertebrates, with special reference to man, followed by an introduction to embryology and to the basic principles of heredity.

Biology 124B — General Botany (3-3) An introduction to the plant kingdom with emphasis on the importance of plants to man.

Applied Laboratory Technology 114-124 (2-8) Theory and practice in the science on a professional basis.

Biology 113B — Anatomy and Physiology (2-2) A study of the anatomy and physiology of the human body. Emphasizes biological principles as applied to vertebrates in general and especially man.

Biology 123B — Anatomy and Physiology (2-2) A continuation of Biology 113B.

Biology 114A — Microbiology (3-2) The characteristics and activities of microorganisms and their relation to health and disease.

Biology 224 — Comparative Vertebrate Anatomy (3-4) Comparative study of the morphology, physiology, and phylogeneses of vertebrate organ systems. Required of pre-dental, pre-medical and biology majors. Prerequisite: Biology 114 and 124 or 124B.

Business Administration and Data Processing

Business Administration 113 — Oil and Gas Law (3-0) A course designed for workers in petroleum production, leasing, scouting and other oil industry activities.

Business Administration 113B — Introduction to Business (3-0) A general business course designed to give the student an understanding of the fundamental principles of business operation.

Business Administration 213R — Real Estate Law (3-0) The legal decisions and statutory provisions regarding the real estate business; legal elements controlling land boundaries and titles.

Business Administration 113C — Business Correspondence (3-0) A study of grammar, punctuation, sentence structure, paragraphing and composition of business letters.

Business Administration 113D — Business Mathematics (3-0) This course covers the simpler exercises and problems of every-day business calculations—including such topics as the use of aliquot parts, practice on short methods of calculation, fractions, percentage, interest and discount, bonds, depreciation, social security, taxes, property taxes, insurance and stocks.

Business Administration 113M — Office Machines (3-0) A course planned to develop in the student a working knowledge of a variety of calculating machines, the dictaphone, the mimeograph, the billing machine, the comptometer and the bookkeeping machine.

A student may arrange to specialize on a particular machine.

Business Administration 113F-123F — Secretarial Practice (3-0) A course designed for students who are interested in the secretarial field. It covers speed dictation, transcriptions, office ethics, duplicating, office machines, filing and postal information; practice is given in interviewing callers, attending business conferences, and in telephone technique.

Business Administration 113S-123S — Elementary Shorthand (2-2-6) Detailed study of principles of Gregg Shorthand by Simplified Functional Method. Special attention is given to word signs, special forms, phrase writing and rapid reading of shorthand. In the second semester emphasis is given to readiness and accuracy in transcription.

Two hours lecture, two hours laboratory, and at least six hours outside work per week is required.

Business Administration 114S-124S—Elementary Shorthand (3-2) (3-7) Detailed study of principles of Gregg Shorthand by Simplified Functional Method. Special attention is given to word signs, special forms, phrase writing, and rapid reading of shorthand.

No credit in shorthand is granted until proper efficiency in typewriting is demonstrated. Students must attain a typing speed of at least sixty words per minute with not more than five errors in order to receive credit in Shorthand 124S.

In the second semester there is continued study and review of the principles of shorthand. Dictation and transcription of new matter with emphasis upon readiness and accuracy in transcription.

Business Administration 113T-123T — Typewriting (1-4) A beginner's course in typewriting. Exercises for the mastery of the keyboard by the touch system, instruction in the care of the machine, study of form and arrangement of simple business letters, and simple centering.

Typewriting problems in addressing envelopes, writing business letters, tabulation, manuscript writing, and legal document writing.

Business Administration 123 — Secretarial Accounting (3-0) A study of the fundamentals of double-entry bookkeeping and their direct application to various business and professions — insurance, law, service operations, medicine, retail stores, and corporations — including the analysis of accounts and the preparation of accounting statements.

Business Administration 123B — Federal Tax Accounting (3-0) Preparation of all forms of tax returns, together with study of pertinent laws and regulations pertaining thereto.

Business Administration 213-223 — Intermediate Accounting (3-3) Financial accounting principles, including treatment of working papers in the advanced stages. Advanced partnership accounting problems dealing with organizations, entrance of new partners, dissolution, and equities. Further study of Corporate Accounting for organization, capital stock, investments, analysis of statements.

Second Semester—Special topics involving problems of consolidation, preparation of consolidated statements, problems in equity with reference to control, branch accounting, fiduciary, and other special types of statements and their analysis.

Prerequisite: Business Administration 123.

Business Administration 213L — Business Law (3-0) Fundamentals, contracts, agency, negotiable instruments, property, and real estate. General principles involving law or bailments, sales, conditional sales, agency, negotiable instruments as they appear in actual cases illustrating practical business problems.

Business Administration 214S-224S — Advanced Shorthand and Office Procedure (3-7) Continued study and review of the principles of shorthand. Emphasis on speed building and transcription.

In the second semester emphasis is on taking dictation at very high rates of speed. Dictation is given in the legal, medical and other technical fields as well as general office routines.

Business Administration 214-224 — Elementary Accounting (3-3) The principles of accounting for a single proprietorship organization. A study of the accounting equation, business transactions, business papers, ledgers, books of original entry, classifications and interpretation of accounts and statements, valuation accounts, accrued and deferred items, and the accounting cycle.

Second Semester—Accounting for partnership and corporate business enterprises. A study of the characteristics of each organization, formation, dissolution, and liquidation.

Prerequisite: Sophomore standing.

Business Administration 213T-223T — Advanced Typewriting Problems (1-4) This course includes business reports, business documents, legal documents, tabulation, statistical material, manuscripts, cutting stencils, various forms of business letters and a continued emphasis upon typing speed and efficiency.

Prerequisite: Business Administration 114T-124T.

E.D.P. 113 — Electronic Data Processing (3-3) An over-all survey of the function of IBM Unit Record equipment to include 024, 082, 514, 085, 402, 548. Control panel wiring will be included in this course. Rental Fee $15.00.

E.D.P. 123 — Electronic Data Processing (3-3) Application of machines studied in E.D.P. 113 to solution of business applications such as payroll, accounts payable, accounts receivable, general ledger, etc. Rental fee $15.00. Prerequisite: E.D.P. 113.

Chemistry

Chemistry 114-124 — General Chemistry (3-4) A course serving the prerequisite requirement for engineering, medicine, dentistry, and other professional courses requiring advanced work in chemistry. During the second semester the laboratory work deals with the general principles and methods of qualitative analysis.

Chemistry 113-123 — Introductory Chemistry (2-2) Non-technical course which meets the needs of those who do not expect to specialize in science, engineering or medicine. Cannot be substituted for Chemistry 114-124 in meeting prerequisite requirements. Chemistry 113-123 and Chemistry 114-124 may not both be counted for credit.

Chemistry 214 — Organic Chemistry (3-4) Aliphatic compounds exclusive of carbohydrates. Prerequisite: Chemistry 114-124 with at least a C average.

Chemistry 224 — Organic Chemistry (3-4) Carbohydrates and aromatic compounds. Prerequisite: Chemistry 214.

Economics

Economics 213 — Principles of Economics (3-0) An examination of fundamental economic concepts and principles.
Prerequisite: Sophomore standing.

Economics 223 — Economic Problems (3-0) A study of contemporary economic issues and problems.
Prerequisite: Sophomore standing.

Education

Education 113*—Introduction to Educational Psychology (3-0) An introductory study of mental life and the psychological principles underlying motivation, behavior, individual differences, and the learning processes.

Education 123*—Introduction to Education (3-0) A brief survey of the general field of education brought out through a study of the evolution of the present-day public school and its practices.

Engineering

Engineering 112 — Engineering Drawing (2-2-2) Lettering, free-hand and instrument drawings, shape and size description, pictorial drawings, charts and graphs, line value and lettering to be stressed throughout the course.

Two lectures, two hours of supervised drafting, and two hours of home work per week.

Engineering 122 — Descriptive Geometry (2-2-2) Auxiliary and oblique views, point, line and plane problems. Development, intersection, highway, geology, and mining problems with emphasis on line value and proper lettering throughout the course.

Two lectures, two hours of supervised problems, and two hours of home work per week.

Prerequisite: Engineering Drawing and Solid Geometry or Trigonometry.

Engineering 213 — Engineering Mechanics (3-0) Newton's laws, work-energy and impulse-momentum principles for particles; force resultants, introductory rigid body statics.

Prerequisite: Credit or registration for Mathematics 223A.

Engineering 223A — Engineering Mechanics (3-0) Newton's laws, work-energy, impulse-momentum principles for rigid bodies, static and dynamic friction.

Prerequisite: Engineering 213 and Mathematics 223A.

Engineering 223B — Strength of Materials (3-0) Analysis of stress and strain; riveted and welded joints; flexure and deflection of beams, shafts, columns; physical properties of materials.

Prerequisite: Engineering 213 and Mathematics 223A.

English

English 112 — Problems of Communication (2-0) Composition and rhetoric for beginning freshmen whose scores on the English

*Education 113-123 are not required for teacher certification in Texas. They are excellent electives and remain on the required list in other states.

Placement Tests indicate the need of a review and a more intensive drill in English composition than is provided in English 113.

English 113 — Composition and Rhetoric (3-0) The development of the student's ability to think for himself and to express his thoughts in correct, clear language. A study of literature in order to encourage reading.

English 123 — Composition and Rhetoric (3-0) Further training in thinking and the ordering of thoughts by the study of the types of composition. Prerequisite: English 113.

English 213 — English Literature (3-0) A survey course using selections from an anthology to emphasize trends in English literature. Advanced composition.

Prerequisite: English 123.

English 223 — English Literature (3-0) The survey of English literature. Advanced composition. Prerequisite: English 123.

English 223B — Technical Report Writing (3-0) Techniques of verbal efficiency in the various media of engineering and scientific communications, with stress on report and research-report preparation, letters and resumes. Required in technological and engineering plans.

Reading Improvement

English 111 — Developmental Reading (1-1) This course will stress the development of basic comprehension skills in reading. It is designed for students who desire increased reading skills. Training will be given in overcoming the weaknesses of individual students and in increasing the speed of reading.

Foreign Language

French 114 — Beginner's French (3-2) Drill in the pronunciation and the grammar of the French language with written exercises, dictation and conversation in French.

French 124 — Composition and Reading (3-2)
Prerequisite: French 114 or two admission units in French from high school.

French 213-223 — Oral Expression, Reading & Composition (3-0) Outside readings assigned from French masters—Balzac, Flaubert, Baudelaire, Ayme, Camus, etc. Prerequisite: French 124.

Spanish 113-123 — Conversational Spanish (3-0) For students who have never studied Spanish. Conversational approach including fundamentals of grammar, readings, and emphasis on oral and written composition.

Spanish 114 — Beginner's Spanish (3-2) Drill in the pronunciation and the grammar of the Spanish language with written exercises, dictation and conversation in Spanish.

Spanish 124 — Composition and Reading (3-2)
Prerequisite: Spanish 114 or two admission units in Spanish from high school.

Spanish 213-223—Oral Expression, Reading & Composition (3-0) Outside readings assigned from Spanish masters—Cervantes, Alarcon, Pardo Bazan, Unarnuno, Goytisolo, etc. Prerequisite: Spanish 124.

Earth and Space Studies

Geology 114 — General Geology (3-3) Physical geology processes modifying the earth's surface; materials and features of the earth's crust. Laboratory work in cartography, mineralogy, and petrology.

Geology 124 — General Geology (3-3) Historical geology; the history of the earth through geologic times as revealed by rocks and fossils; the origin and development of plant and animal life. Laboratory work in paleontology.

Prerequisite: Geology 114.

Astronomy 113—A Survey of Astronomy (3-0) The main features of the known universe and the principles involved in their discovery. A non-mathematical survey recommended for all students.

Astronomy 123 — A Survey of Astronomy (3-0) A continuation of Astronomy 113. Prerequisite: Astronomy 113.

Meteorology 113 — Meteorology (3-0) The science of Meteorology presented concisely and systematically in its present state of development. The primary purpose is to set forth the facts and principles concerning the behavior and responses of the atmosphere.

Geology 213 — Mineralogy (2-8) Introductory Course in the study of minerals, including elements of crystallography; determination of the common minerals by their physical properties.

Prerequisite: Trigonometry, Geology 124, and Chemistry 114.

Geology 223 — Petrology (2-4) Origin, mode of occurrence, and determination of the common types of igneous, sedimentary, and metamorphic rocks.

Prerequisite: Geology 213.

Geology 223A — Invertebrate Paleontology (2-4) Invertebrate, phyla; sponges, coelenterate, echinodermata, brachiopods, mollusks, and arthropods, stratigraphic and evolutionary paleontology.

Prerequisite: Geology 114-124. Two lectures and four lab hours a week.

Geography 213 — Economic Geography (3-0) A study of the relationship of man to his environment; problems of production, manufacture, and distribution of goods in the various regions of the world.

Geography 223 — World Geography (3-0) The earth, its climatic regions; the relation of human activities to physical environments; major cultural divisions and selected regions and countries.

Government

Government 213 — American Government (3-0) A functional study of the American constitutional governmental system, of the origins, developments and present-day problems of the national government, of the rights, privileges and obligations of citizenship.

Prerequisite: Sophomore standing.

Government 223 — National and State Government (3-0) The nature, organization, and general principles of local government in the United States, with special attention to these forms in Texas; the judicial, executive, and administrative functions in federal and state government; financing governmental activities.

Prerequisite: Sophomore standing.

History

History 113 — History of England (3-0) Survey of the social economic, political, and intellectual development of Britain from the prehistoric period through the fifteenth century.

History 123 — History of England (3-0) Continuation of History 113. Survey of the social, economic, political, and intellectual development of Britain and the British Empire to the present.

History 113A — Western Civilization in Mediaeval Times (3-0) A survey course in the cultural and institutional development of the nations of western Europe through the sixteenth century.

History 123A — Western Civilization in Modern Times (3-0) Continuation of History 113A. A survey course in the cultural and institutional development of the nations of western Europe from the sixteenth century to the present time.

History 213 — History of the United States (3-0) A general survey of the history of the United States from the era of discovery to the Civil War.

History 223 — History of the United States (3-0) A general survey of the history of the United States from the Civil War to the present time.

Home Economics

Home Economics 113A — Principles of Food Selection and Preparation (2-4) Fundamental principles in the selection and preparation of foods; nutritive values; cost of foods.

Home Economics 123A — Meal Management (2-4) For majors in Home Economics, hotel or restaurant management. Planning, managing, and serving meals suitable for family groups for all occasions. Selection and use of table appointments.

Home Economics 113B — Costume Design and Selection (2-4) Fundamental principles of design and color applied to the selection and planning of appropriate dress. Emphasis on line, color, and texture in relation to the individual, with laboratory application.

Home Economics 113C — Textiles (2-2) The study of fibers, fabrics, and finishes for application in choices of fabrics for clothing and home furnishings.

Home Economics 123B — Clothing (2-4) Fundamental principles of selection and construction of clothing. Use and alteration of commercial patterns. Problems selected according to the ability and learning experience of the student.

Home Economics 123C — Nutrition (2-2) Fundamental principles of human nutrition applied to the individual, family, and community nutrition problems. Chemistry, physiology and economics of nutrition.

Journalism

Journalism 113 — Mass Communications (3-2) (3-2) An introduction to journalism designed to give the student an understanding of the media of mass communications in modern society and the career opportunities in the field. Laboratory: Two hours per week for non-majors, three hours per week for majors. Advertising majors may not count this course for degree credit unless taken in the freshman year.

Journalism 213 — General Reporting (3-2) Instruction and practice in interviewing and writing news stories: discussion of news values, news source, and principles of writing for newspaper, radio, TV. Laboratory: two hours per week.

Prerequisites: Thirty hours college credit including at least a C average in freshman English. Credit in high school or college typing or registration in college typing.

Journalism 223 — General Reporting (3-2) Emphasis on handling types of news stories such as meeetings, speeches, interviews, deaths, accident and disaster, police and court matters. Introduction to feature and editorial writing. Laboratory: two hours per week.

Prerequisite: Same as for Journalism 213.

Mathematics

The Mathematics program in Tyler Junior College is especially designed to meet the varying needs, backgrounds and abilities of its students. Courses are arranged to cover the fields of technological applied mathematics, liberal arts, business and engineering.

Engineering schools no longer allow credit for algebra and trigonometry taken at the college level. In order to go directly into analytic geometry and calculus, however, certain safeguards have been arranged. Such students are permitted to proceed in the advanced mathematics as follows:

For Analytic Geometry (Mathematics 123A):

1. Credit in College Algebra (Mathematics 113-A) and Trigonometry (Mathematics 113B) or
2. A satisfactory score on an advanced mathematics test.

For Calculus (Mathematics 213):

1. Credit in Analytic Geometry, or
2. Concurrent registration in Mathematics 123A with grades of C or better in both mathematics 113A and 113B, or
3. A satisfactory score on an advanced mathematics test, and concurrent registration for Mathematics 123A.

Mathematics 113A — College Algebra (3-0) An axiomatic approach to the basic concepts of the structure of algebra as a mathematical system; sets; relation and function; negative and fractional exponents; the quadratic function; polynomials and elementary theory of equations; systems of equations including matrix methods; inequalities; mathematical induction; progres-

sions; binominal theorem; inverse functions (principally logarithmic and exponential).

Prerequisite: 1½ years High School algebra or consent of the Mathematics department.

Mathematics 113C — College Algebra (3-0) A review of elementary algebra; factoring; fractions; linear and quadratic equations; systems of linear equations; exponents and radicals; logarithms; progressions; the binominal theorem.

Credit for Mathematics 113C will not be given to students who have credit for 1½ years or more of High School algebra.

Prerequisite: One year of high school algebra or consent of the Mathematics department.

Mathematics 113B — Trigonometry (3-0) Angular measure; functions of angles; derivation of formulas; identities; solution of triangles; equations; inverse functions; complex numbers.

Prerequisite: 1½ years High School algebra.

Mathematics 113E—Applied Mathematics (3-0) Signed numbers; fractions; percentage; ratio and proportion; logarithms; slide rule; solution of triangles by use of trigonometry.

Mathematics 113F — Fundamentals of Mathematics (3-0) A prescribed course for the Business Data Processing Curriculum. Basic logic; the number system; algebra with emphasis on problem solving; computation with logarithms and with numbers in bases other than 10; Boolean Algebra.

Mathematics 123 — Mathematics of Finance (3-0) Simple and compound interest; equations of value; annuities; amortization and sinking funds; depreciation; bonds.

Prerequisite: Mathematics 113A or consent of the Mathematics department.

Mathematics 123A — Analytic Geometry (3-0) Cartesian coordinates; the straight line; the circle, and conic sections; transformation of coordinates; polar coordinates; parametric equations; transcendental and higher plane curves.

Prerequisite: Mathematics 113A, 113B, or see introductory paragraph.

Mathematics 213 — Calculus (3-0) Variables, functions and limits; differentiation of algebraic functions, with applications; differentials; mean value theorem; integration of algebraic functions, with applications.

Prerequisite: Mathematics 123A, or see introductory paragraph.

Mathematics 223A — Calculus (3-0) Differentiation and integration involving transcendental functions, with an extended study of methods of integration, with applications; approximate integration; improper integrals; indeterminate forms.

Prerequisite: Mathematics 213.

Mathematics 223 — Differential Equations (3-0) Equations of the first order and degree; linear differential equations; operational methods; special types of higher order equations; series solutions; applications of differential equations.

Prerequisite: Mathematics 223A.

Nursing

Nursing 111 — Drugs and Solutions (1-1) This course is designed to assist the student in becoming proficient in the fundamentals of mathematics so that they will be able to accurately calculate dosage and/or prepare correct solution for medication administration.

Nursing 112 — Introduction To Nursing and Professional Adjustments I (2-0) Designed to assist the student in her adjustment to the College and to the Profession of Nursing. Library usage, study habits, and budgeting of time are taught. Emphasis is placed upon the qualifications of a good nurse.

Nursing 121 — Introduction to Medical and Surgical Nursing (1-0) An introductory course designed to prepare the student for study of specific disease conditions. The course includes effects of illness upon the family, the psychological and rehabilitative aspects of illness, and diet therapy in disease.

Nursing 112S — Medical Nursing I (2-10) This nine weeks course includes a discussion of the pathology, prevention, and treatment of medical conditions. The course is divided according to the anatomical systems of the body, with considerations given to related, social, emotional, and mental aspects of patient care. Guided practice in the nursing care of patients in medical services of the local hospitals is included. Surgical nursing and diet therapy are correlated.

Nursing 112AS — Surgical Nursing I (2-10) This nine weeks course includes a discussion of the pathology, prevention, and treatment of surgical conditions. The content is divided according to the anatomical systems of the body, with consideration given to related to social, emotional, and mental aspects of the patient. Students receive guided practice in the nursing care of patients in the surgical services of the local hospitals. Medical Nursing and diet therapy are correlated.

Nursing 113—Fundamentals of Patient Care I (2-2) A lecture and laboratory course designed to develop in the student attitudes and ideals desirable in a nurse and the knowledge and skills necessary to give effective nursing care, which includes competent guidance of the individual patient. A study of the aims and methods of teaching health to the individuals and groups in the nursing care of patients in the hospital and community and nursing services.

Nursing 123—Fundamentals of Patient Care II (2-2) A continuation of nursing 113.

Nursing 212S — History of Nursing (2-0) An introduction to the School of Nursing program; nursing trends which have brought nursing to the level of a profession. Emphasis is placed on the qualifications of a good nurse and the adjustments necessary in the profession. Designed to help the student appraise, develop, and maintain an adequate standard of sound physical, mental, and social habits of living.

A survey of the historical developments of nursing from its early conception to the modern times with special emphasis on contemporary movements.

Nursing 215 — Medical Nursing II (4-10) An advanced course in the pathology treatment, and nursing care of patients with medical diseases. The student receives guided practice in nursing care of patients. Correlated with Surgical Nursing II as well as the related socio-psychological aspects of illness, and diet in treatment of disease.

Nursing 214 Surgical Nursing II (4-10) An advanced course in the pathology, treatment, and nursing care of patients with surgical diseases. The student receives guided practice in nursing care of patients. Correlated with Medical Nursing II and diet in the treatment of disease. A study of the principles of asepsis and procedures used in care of patients in the operating room are included.

Nursing 223—Community Aspects of Nursing Care (3-0) A study of the principles and methods of teaching health to individuals and groups, and the application of these methods to the nursing care of patients in the hospital, outpatient department, and community nursing services. A study of the principles and trends in public health nursing and general responsibilities of the nurse in the community.

Nursing 225E — Principles and Practice of Obstetric and Gynecologic Nursing (5-0) This course is divided into two units. The first deals with the psychological conditions of a normal preg-

nancy, labor, puerperium, the complications that may arise during any of the periods, the nursing care in normal and complicated conditions, and the care of the newborn, including the premature infant. The second unit is concerned with the diseases of the genital system of the female and includes etiology, symptomatology, prevention, treatment, both operative and nonoperative, and the nursing care. In both units emphases are placed on the social and health aspects of the nursing care, and diet as related to these conditions.

Pharmacology

Pharmacology 113 — Pharmacology and Therapeutics (3-0) Pharmaco-dynamics of therapeutically useful agents; signs and symptoms of overdose and means of counteraction; side effects; synergism, antagonism, and corrective agents. Lecture, demonstrations and laboratory experiments.

Physical Education

Physical Education 111, 121, 211, 221 — Physical Training for College Men (0-2) Includes such activities as football, basketball, baseball, volleyball, track, table tennis, tennis, marching organizations, badminton, softball, and physical fitness activities.

Physical Education 111A, 121A, 211A, 221A — Physical Training for College Women (0-2) Physical activities for women including basketball, volleyball, table tennis, tennis, archery, tap dancing, badminton, etc.

Physical Education 113C — Art of Daily Living (3-0) (Women) A course designed to place emphasis on the needs and activities of the individual student to assist in making proper adjustments. The fundamental aim is to develop self-assurance through knowledge that one's health, appearance, clothes, styling, make-up, and posture are correct. Students are given personalized instruction with respect to their own problems. By means of lectures, demonstrations, practice, and opportunities to perform in public, an effort is made to develop in the student greater poise and alertness. Instruction includes techniques for balance and control of movement, selection and care of clothing.

Physical Education 123C — Art of Daily Living (3-0) (Women) A continuation of Physical Education 113C.

Physical Education 213C — Appreciation of Dance (3-2) (Women) Basic fundamentals and interpretations of dance; the principles and applications applied to the interpretation of modern and conventional dance.

Physical Education 223C — Appreciation of Dance (3-2) (Women) A continuation of Physical Education 213C.

Physical Education 113 — Methods (2-2) The organization and administration of physical education in the public schools. The course of study for physical education as recommended by the State Department of Education for high schools is used as a basis for study. Laboratory periods are devoted to actual problems in the field.

Physical Education 123 — Methods (2-2) A continuation of Physical Education 113 with special attention given to problems in the physical education field.

Physical Education 113A — Theory of Football and Track (3-0)

Physical Education 123A — Theory of Basketball and Baseball (3-0)

Physics

Physics 113 — Elementary Physics (3-0) A course for technical students. This course will not meet the needs of those planning careers in science, medicine, psychology, mathematics, or engineering. Credit will not be given if the student has taken Physics 114 or 124.

Mechanics, heat, sound, electricity, and magnetism.

Two lectures and one demonstration each week.

Physics 114B — General Physics (3-3) (Previously Physics 124) A course for premedical students, majors in pharmacy and architecture, and other students who need a two-semester technical course in physics but who do not intend to take additional courses in physics.

Mechanics, heat, and sound.

Physics 124B — General Physics (3-3) (Previously Physics 114) A continuation of Physics 114B.

Electricity and magnetism, Light, atomic and nuclear physics.

Prerequisite: Physics 114B.

Physics 124A — Mechanics (3-3) A course for students who intend to major in physics, chemistry, or mathmatics.

Prerequisite: Credit or registration in Mathematics 213.

Physics 214A — Advanced Physics (3-3) (Previously Physics 224) A course designed to meet the second year physics requirements of students in engineering, physics, medicine, chemistry, or mathematics.

Heat, Wave-motion, and optics.

Prerequisite: Physics 124A, or Engineering 213, and credit or registration for Mathematics 223A.

Physics 224A — Advanced Physics (3-3) (Previously Physics 214) Continuation of Physics 214A. Electricity and magnetism, and modern physics.

Prerequisite: Physics 124A or Engineering 213 and credit or registration for Mathematics 223A.

Psychology

Psychology 110 — Freshman Orientation. Freshman Orientation is a course designed to help students bridge the gap between high school and college. Library usage, study habits, good attitudes, and budgeting of time are taught. The giving and interpretation of standardized tests and vocational counseling are included in the course. Required of all beginning students unless excused by the Dean of the College.

Psychology 213 — Introductory Psychology (3-0) A survey of the principles of general psychology developed by lectures, recitations, and demonstrations in class.

Prerequisite: Sophomore standing.

Psychology 223 — Applied Psychology (3-0) This course deals with the application of psychological facts and principles to problems and activities of life and work.

Psychology 223A — Child Growth and Development (3-0) How children grow and develop, the stages in the process, and the factors which influence growth and development are considered. A course for Nursing students.

Sociology

Sociology 213 — Introduction to Sociology (3-0) Introduction to the study of society. The community and its structure; the ecological approach to human relationships; elements and processes of social interaction; social change; society and the person.

Prerequisite: Sophomore standing.

Sociology 223 — Social Problems (3-0) The study and analysis of the major social problems of modern society.

Prerequisite: Sophomore standing.

Speech and Drama

Speech 111 — Parliamentary Procedure (1-0) A course covering correct procedure in the forming of an organization and how to conduct meetings properly.

Speech 111A — Forensic Activity (0-2) Active participation on the intercollegiate forensics squad with special attention to debate. Attendance at tournaments, contests, and speaking engagements

as assigned by the instructor. Individual instruction. May be repeated for credit but not more than three hours can be counted toward graduation.

Speech 121—Dramatic Production Activities (0-2) Fundamentals of theatrical mounting. Basic techniques of play selection and production including stagecraft, make-up, costuming, and properties. Extra hours of participation during play production time. A student may earn up to three hours credit, not exceeding one per semester.

Speech 113 — Fundamentals of Speech (3-0) Fundamentals of oral communications; use of the body and voice; participation in various speech situations; planning, organizing and delivering general platform speeches. Speech 113 and Speech 223A cannot both be counted for credit.

Speech 113A — Voice and Diction (3-4) (3-0) Fundamental principles of diction, voice development, and interpretation; intensive practical application through classroom exercises and special projects; developments of the ability to speak before groups. For drama majors three lectures and four laboratory hours per week, for others three lectures per week.

Speech 123A — Oral Interpretation (3-4) (3-0) Continuation of Speech 113A with addition of basic principles of acting and practical work in scenes from plays. For drama majors three lectures and four laboratory hours per week, for others three lectures per week.

Speech 213 — Debate (3-0) A study of the principles and theories of debate technique. Group, forum and panel discussions are held on foremost controversial issues. Especial attention is given to the current national college debate question. Various intramural and inter-college debates.

Speech 223A — Business and Professional Speaking (3-0) Special types and techniques of speeches most common to business and professional people; theory and practice in business speech situations, personal conferences, oral reports, sales talks and occasional speeches.

Prerequisite: Sophomore standing, except by permission of the Dean.

Speech 113 and Speech 223A cannot both be counted for credit.

Speech 213A — Introduction to the Theater (3-2) An introductory study of the art and aesthetics of drama, including an elementary consideration of plays and playwriting; the techniques and styles of acting and directing; present day production techniques and theaters.

Distributive Education

In accordance with its stated objectives, Tyler Junior College co-operates with business and industrial concerns of the area by providing personnel training programs. Specialized non-credit courses in Distributive Education are organized whenever there is a request by a sufficient number of persons for such a class.

The courses are taught in either the regular day session or in the Evening Division to suit the needs of the students.

TYLER JUNIOR COLLEGE

TYLER, TEXAS

TECHNICAL INSTITUTE

THE TECHNICAL AND INDUSTRIAL

DIVISION OF

TYLER JUNIOR COLLEGE

TECHNICAL INSTITUTE

The Technical and Industrial Division

Tyler Junior College technical courses are pre-employment training courses which fit the student into the technical, trade and industrial world.

The program is divided into Technical Institute courses, and Trade Extension classes.

Day Courses. Courses offered in the day division, technical in nature, are operated on the semester hour plan. These courses are one or two years in length and are divided into semesters. Upon completion of appropriate units, the student is given credit in terms of semester hours.

Admission to day technological courses is based upon graduation from an accredited high school or upon satisfactory completion of an entrance examination.

Trade Extension Classes. Tyler Junior College, in cooperation with the Texas Education Agency, offers "trade extension" classes. Instruction is given to trade and industrial workers in courses that are designed to teach the workers more about their jobs, and thereby increase their productivity and assure more opportunities for advancement. Any worker may enter a trade extension class if the instruction given is such as will help him in his daily work or fit him for promotion to a better job in the same occupation. Pre-employment training cannot be offered in trade extension classes but all workers are eligible for trade extension classes who are over sixteen years of age and are employed in those trades or industrial pursuits for which supplementary instruction can be given.

Tuition. Technical Institute Tuition.

Tyler Junior College District Residents, $60.00 per semester for a whole or part of a program.

Texas non-district residents, $90.00 per semester for a whole or part of a program.

Non-residents of Texas, $200.00 per semester for a whole or part of a program.

The Electronic Data Processing Program has a $15.00 per semester rental fee in addition to the tuition.

(Tuition rates are subject to change by the State Legislature.)

Electronic Data Processing

This is a well-rounded nine months program fitting the student to qualify for employment in the field of automatic data processing. The curriculum centers around the operation and control of data processing machines, including control panel wiring and programming of machines other than the electronic digital computer.

The program is under the jurisdiction of the Business Department, and a certificate of proficiency is granted upon successful completion of the course.

First Semester:

English 113 — Composition and Rhetoric
Business Administration 113B — Introduction to Business
Electronic Data Processing 113 — Principles and Practice
Mathematics 113F — Related Mathematics
Business Administration 214 — Principles of Accounting
Psychology 110
Physical Training

Second Semester:

English 123 or 223B — Composition or Technical Report Writing
Business Administration 113M — Office Machines
Electronic Data Processing 123 — Principles and Practice
Business Administration 224 — Principles of Accounting
Speech 113A — Voice and Diction
Physical Training

Petroleum Technology

Petroleum Technology. The petroleum technology curriculum is established with the advice and co-operation of employers and workers in the oil fields, to provide preliminary training for workers in various aspects of petroleum development and production. The oil industry requires employees with background for employment in locating, drilling and maintaining wells, and in handling and refining petroleum products.

While scientific background and related information is included in the technology course, major emphasis is upon operation in the oil field, with opportunity for field trips and for employment.

Petroleum technology majors have available to them training in four broad areas: exploration, development, marketing, and construction and maintenance. The two-year program listed below is the pattern suggested for students who plan to enter the petroleum industry in the field of exploration and development.

First Year — First Semester

Petroleum Technology 112 — Petroleum Development
Petroleum Technology 112A — Rotary Drilling Fluids
Petroleum Technology 112B — Drilling Equipment Field Lab
English 113 — Composition and Rhetoric
Mathematics 113E — Applied Mathematics*
History 213 — History of the United States

First Year — Second Semester

Petroleum Technology 121 — Oil Field Records
Petroleum Technology 122 — Production Methods
Drafting 111 — Blueprint Reading
Petroleum Technology 122A — Production Equipment Field Lab
English 223B — Technical Report Writing
Mathematics 113C — College Algebra*
History 223 — History of the United States

Second Year — First Semester

Petroleum Technology 213 — Introduction to Petroleum Industry
Petroleum Technology 211 — Well Logging Methods
Petroleum Technology 212—Petroleum Laboratory Methods
Physics 113 — Elementary Physics
Electronics 113 — Basic Electronics
Government 213 — American Government

Second Year — Second Semester

Petroleum Technology 222 — Geophysical Methods
Petroleum Technology 221 — Planetable Surveying for Geophysics
Petroleum Technology 222A — Natural Gas Production
Petroleum Technology 221A — Hydraulics for Petroleum Technologists
Mathematics 113B — Trigonometry*
Drafting 223B — Map Drafting
Government 223 — American Government

*Students will be scheduled in mathematics classes upon the results of tests and subjects completed before entering.

Description of Courses

Petroleum Technology 112 — Petroleum Development (2-0) Exploration methods, principles of oil field development, spacing of wells, rotary and cable tool drilling methods, drilling fluids, directional drilling, oil field hydrology, well completion practices.

Petroleum Technology 112A — Rotary Drilling Fluids (1-2) Testing methods, determining drilling fluid characteristics, drilling fluid problems, use of special drilling fluids, lab exercises consisting of the practice of altering properties of fresh water and special drilling fluids for drilling through troublesome zones with the rotary system.

Petroleum Technology 112B — Drilling Equipment Field Lab (1-2) Trips to examine different types of drilling equipment in actual operation in the field. Also trips to service companies to study their drilling tools.

Petroleum Technology 121 — Oil Field Records (1-0) A study of records kept by oil companies and reports made within companies and to the railroad commission.

Petroleum Technology 122 — Production Methods (3-0) Methods of production of oil, including lease layout and operation, operation of treating equipment, well stimulation and work over.

Petroleum Technology 121A — Refining (1-0) Study of chemistry of hydrocarbons, history of development of refining, and processes of refining.

Petroleum Technology 122A — Production Equipment Field Lab (1-2) Trips to examine different types of production equipment and treating equipment in actual operation and gas lift.

Petroleum Technology 213 — Introduction to Petroleum Industry (3-0) General study of the industry, including history of the industry, chemistry of petroleum, its occurrence in nature and its importance in the world economy, leasing and royalty exploration, drilling and production methods, conservation, transportation and refining, economics of the oil industry.

Petroleum Technology 211 — Well Logging Methods (1-0) A study of theories of electrical, micro-electrical radiation, optical, chemical, and mechanical well logging methods and application of these theories, field examples and problems.

Petroleum Technology 212—Petroleum Laboratory Methods (1-2) A laboratory including tests made in the oil industry. Emulsion breaking, field tests made on crude oil, elementary refinery tests, corrosion tests, and lubricating oil tests and subsurface laboratory methods.

Petroleum Technology 221 — Planetable Surveying for Geophysics (1-2) Use of the planetable and alidade in surveying as applies to use by geophysical party.

Petroleum Technology 221A — Hydraulics for Petroleum Technologists (1-0) Hydraulics in drilling, in oil pipelines, and in artificial lift.

Petroleum Technology 222 — Geophysical Methods (3-0) Theory of geophysical methods; one complete problem in Sceismic coverage of an area.

Petroleum Technology 222A — Natural Gas Production (2-0) Field handling of natural gas, study of methods, equipment technology of natural gas.

Drafting

First Year — First Semester

Drafting 113A — Engineering Drawing
Drafting 113B — Freehand Drawing
English 113 — Composition and Rhetoric
Mathematics 113E — Applied Mathematics*
History 213 — History of the United States

First Year — Second Semester

Drafting 123A — Architectural Drawing
Drafting 123B — Mechanical Drawing
English 223B — Technical Report Writing
Mathematics 113C — College Algebra*
History 223 — History of the United States

Second Year — First Semester

Drafting 213A — Machine Drawing
Drafting 213D — Descriptive Geometry
Government 213 — American Government
Mathematics 113B — Trigonometry*
Physics 113 — Elementary Physics

*Students will be scheduled in mathematics classes upon the results of tests and subjects completed before entrance.

Second Year — Second Semester

Drafting 223B — Map Drafting
Drafting 223C — Plane Surveying
Government 223 — American Government
Speech 223A — Business and Professional Speaking
Electronics 113 — Basic Electronics

Description of Courses

Drafting 111 — Blueprint Reading (1-0) Interpretation of blueprints with emphasis on the obtaining of information from mechanical and electronic blueprints for Petroleum Technology majors.

Drafting 113A — Engineering Drawing (2-3) A course designed to cover the basic requirements for an engineering degree with extra emphasis put on drafting skills. The material covered includes Lettering, Instruments and their use, applied geometry, orthographic freehand and instrument drawings, auxiliary views, sections and conventions, pictorial drawings, dimension and notes, threads and fasteners, working drawings, charts, graphs and diagrams. Term project — a set of working drawings of a piece of equipment having three or more parts.

Drafting 113B — Freehand Drawing (2-3) A course designed for the draftsman to develop the skill to do good orthographic and pictorial freehand drawings. Several types of pictorial drawings will be studied and practiced, such as Axnometric, (Trimetric, Diametric, Isometric), Oblique (Cavalier, Cabinet, and projection) Perspective (1, 2, and 3 point perspective and the measuring point method). Pictorial sectional and exploded drawings will be stressed along with product illustration.

Drafting 123A — Architectural Drawing (2-3) A course in home planning with emphasis on details. A complete set of plans for a one-story home is required. Some time is spent in elementary structural drafting such as terminology, shapes and working detail drawings as applied in structural drafting.

Drafting 123B — Mechanical Drawing (2-3) A second course in mechanical drawing. Further study into fundamentals, such as intersections, development, keys, rivets and springs, oblique auxiliary, rotation gears, cams and pipe drafting. Added emphasis is given the appendix as applied to making industrial drawings to acquaint the students with the industrial practices in making details, assemblies and isometric single and double line drawings.

Drafting 213A — Machine Drawing (2-3) Machine drafting, including details and assemblies of machine parts, jigs and fixtures, with emphasis on the use of American Standards. Templates and industrial drafting equipment. Additional time is spent on drafting in the welding and foundry field.

Drafting 213D — Descriptive Geometry (2-3) A course involving the principles and application of orthographic projection; space relations of points, lines, and surfaces; the true length of lines in space; space surfaces and intersections and developments; intersections of curved surfaces, cylinders, cones, and spheres; highway, geology and mining problems.

Drafting 223B — Map Drafting (2-3) Map Drafting emphasizing lettering, symbols, scales, lease maps, township maps, highway maps and computations, pipe lines, mapping by coordinates and from surveying notes. Most of the work is in ink, using paper, linen and some of the plastics. Some work is done in topography and aerial maps using Edgar Tobin's "Maps for the Oil Industry" as a text. Field trips through local industries are used to emphasize industrial practices. More work is added in the workbook.

Drafting 223C — Plane Surveying (2-3) The use and care of surveying instruments, plane surveys with Transit, and tape, profiles and topography with level, computing cross sections, mapping from notes and computations, using coordinates, and map making with the plane table.

Electronics

First Year — First Semester

Electronics 112 — DC and AC Circuits and Machines
Electronics 113 — Basic Electronics
Electronics 113L — Basic Electricity Laboratory
English 113 — Composition and Rhetoric
Mathematics 113E — Applied Mathematics*
History 213 — History of the United States

First Year — Second Semester

Electronics 122 — Vacuum tube and transistor circuit design
Electronics 122A — Industrial Control Electronics
Electronics 123L — Basic Electronics Laboratory
English 223B — Technical Report Writing
Mathematics 113C — College Algebra*
History 223 — History of the United States

*Students will be scheduled in Mathematics classes upon the results of tests and subjects completed before entering.

COMMUNICATIONS OPTION

Second Year — First Semester

Electronics 213 — Electronic Communications
Electronics 213L — Advanced Electronic Laboratory
Engineering 112 — Engineering Drawing
Physics 113 — Elementary Physics
Government 213 — American Government

Second Year — Second Semester

Electronics 223 — Advanced Electronic Communication
Electronics 223L — Advanced Communication Laboratory
Mathematics 113B — Trigonometry*
Speech 223A — Business and Professional Speaking
Government 223 — National and State Government

INDUSTRIAL INSTRUMENTATION OPTION

Second Year — First Semester

Instrumentation 213 — Automatic Controls (3-0)
Instrumentation 213L — Industrial Instrumentation Laboratory (0-6)
Engineering 112 — Engineering Drawing
Physics 113 — Elementary Physics
Government 213 — American Government

Second Year — Second Semester

Instrumentation 223 — Industrial Electronics Instruments (3-0)
Instrumentation 223L — Advanced Instrumentation Laboratory (0-6)
Mathematics 113B — Trigonometry*
Speech 223A — Business and Professional Speaking
Government 223 — National and State Government

Description of Courses

Electronics 112 — DC and AC Circuits and Machines (3-0)

Electrical circuits. AC and DC circuit parameters. Ohm's Law, Kirchoff's law. Resistive and reactive circuit equations. Magnetism and electromagnetic induction. Motors and generators. Transformers. Tuned circuits, resonance and filters. Principles of measuring equipment. Power measurement in AC and DC circuits.

*Students will be scheduled in mathematics classes upon subjects completed before entering.

Electronics 112A — Basic Television (3-0) A study of the television system. Standards of transmission. Channel allocation. Transmission and reception of picture information. Picture quality, scanning and synchronizing. The associated sound signal. The camera tube. Electron multipliers. The television studio.

Electronics 113 — Basic Electronics (3-0) A study of electron tube principles. Physical features, function of the tube elements, standard letter symbols, static and dynamic factors. Tube parameters. Biasing methods. Schematic diagrams and circuit equations. The electronic power supply. Measuring devices. Audio-frequency amplifiers. Transmission and reception of radio signals. Frequency modulation. Transistor principles. The transistor amplifier.

Electronics 122A — Industrial Control Electronics (3-0) Control signals and devices. Transistors and solid-state diodes. Silicon-controlled rectifiers. Principles of thermistors. Control signal oscillators. Coils and reactors. Commercial power supplies. Transducers and photoelectric circuits. Principles of Telemetering. Thyratrons. Gating and switching circuits. Generators and motor control systems. Servo mechanisms and circuits. Magnetic and dielectric amplifiers. Saturable reactors. Counters and indicators. Control circuits and systems. Error detection and process control. Computer systems.

Electronics 113L — Basic Electricity Lab (0-6) The lab consists of tests and measurements of electrical circuits at low and medium frequency. Familiarization of component parts. Voltage and current measurements. Construction and testing of M derived and Constant K filters. Tuned resonant circuits. Measurement of power in AC and DC circuits. Experiments with motors and generators. Resistive and reactive networks.

Electronics 123L — Basic Electronics Lab (0-6) Tests and measurements of standard, triode, and pentode amplifier circuits. Voltage gain and power gain measurements. Impedance matching. Coupling circuits. Application of the various amplifiers to control devices. Construction of photoelectric amplifiers. Analysis of transducers. Use of photoelectrics to control systems.

Electronics 122—Vacuum Tube and Transistor Circuit Design (3-0) Broad-band amplifiers for picture reproduction. Audio amplifiers. Measurement of video and picture carrier signals, and pulse voltages. Pulse generators for sweep signals. Amplifier gain. High and low frequency response characteristics. Methods of compensating for loss of response. Square wave analysis. Control circuits

for television receivers. Detection of radio and picture carrier signals. Sync separation. RC and RL transients. Design problems for audio and video amplifiers circuits. RF and IF amplifiers. Noise reduction circuits.

Electronics 213 — Electronic Communication (3-0) Fundamentals of radio communication. Basic transmitters. Low frequency tank circuits. Radio frequency amplifiers, band-pass amplifiers, RF oscillators and Heterodyne detection. Antennas and transmission lines. Field strength measurements. Design of antennas. Frequency measurements. The Broadcast station.

Electronics 223 — Advanced Electronic Communication (3-0) Mobile radio equipment. Radio direction finders. Airborne radio. Loran system. Airborne and marine Radar systems. Basic communication laws.

Electronics 222A — Advanced Television (3-0) A study of the principles of television circuits; image analysis, studio cameras and remote pick-up systems. The visual and aural transmitters. Maintenance of studio, control room, and film reproduction equipment. Television receiver circuits. Color transmission and reception.

Electronics 213L — Advanced Electronic Lab (0-6) A continuation of Electronics 123L — This lab covers the design and construction of resistance coupled and transformer coupled amplifiers. Experiments with square wave and pulse oscillators. Transistor and vacuum tube amplifiers, and oscillator circuits. Circuit tracing techniques. Use of the oscilloscope in analyzing waveform and pulse voltages.

Electronics 223L — Electronic Communication Lab (0-6) Tests and measurements of high frequency oscillators. Experiments with RF amplifiers used in transmitters. Construction and analysis of basic transmitters. Reactance tube modulator and the FM system. Demonstration and operation of available micro-wave equipment.

Instrumentation 213 — Automatic Controls (3-0) A study of automatic control theory. Components and circuits for control. Phase-shift circuits. Time-control devices. Application of non-linear devices to control systems Sensors and transducers. Principles of control systems and servo-mechanisms. Open-cycle and closed cycle control systems. Antihunt circuits. Electronic opera-

tion of DC motors. Electronic motor drives. Motor control using magnetic amplifiers and semi-conductor devices.

Instrumentation 213L — Industrial Instrumentation Lab. (0-6) The lab consists of tests and measurements of control systems, operation of automatic motor controls. Construction and operation of electronic timers. Control and operation of electronic devices with photo-electric systems.

Instrumentation 223 — Industrial Electronic Instruments (3-0) Advanced study in control theory and process control systems. Problems in the design of servo systems. Principles of electronic measuring instruments used in industry.

Instrumentation 223L — Advanced Instrumentation Lab (0-6) A continuation of Industrial Instrumentation Lab, with emphasis on radio control systems. Construction and operation of a simple computer circuit. Operation of synchro generator and motor systems. Tone signaling control system.

Surveying

First Year — First Semester

Surveying 116 — Elementary Surveying
English 113 — Composition and Rhetoric
Mathematics 113E — Applied Mathematics*
History 213

First Year — Second Semester

Surveying 126 — Plane Surveying
English 223B — Technical Report Writing
Mathematics 113C — College Algebra*
History 223

Second Year — First Semester

Surveying 216 — Plane Surveying
Drafting 223 — Map Drafting
Mathematics 113B — Trigonometry
Government 213 — American Government

Second Year — Second Semester

Surveying 226 — Route Surveying
Drafting 223B — Map Drafting
Government 223 — National and State Government
Speech 223A — Business and Professional Speaking

*Students will be scheduled in mathematics upon the results of past records or college tests.

Description of Courses

Surveying 116 — Elementary Surveying (3-8) History of land surveyings; care and adjustment of surveying instruments; land surveying; traverses; leveling; notekeeping; computation; and precision.

Surveying 126 — Plane Surveying (3-8) Use and care of instruments; notekeeping; distance measurements; traverse suveying; areas; angles and elevations; leveling; profile cross sections; legal principles; dendrology.

Surveying 216 — Plane Surveying (3-8) Plane-table and transit methods for topographic map production; field problems related to highway surveying; circular and vertical curves; earthwork, volumes and cost estimates; triangulation and base lines.

Surveying 226 — Route Surveying (3-8) Theory and practical application of simple, reverse, and compound curves; spirals and earthwork; right-of-way; cross sections; and estimates.

TYLER JUNIOR COLLEGE

TYLER, TEXAS

MUSIC DEPARTMENT

(Accredited by The Texas Association

of Music Schools as the

TEXAS EASTERN SCHOOL OF MUSIC

of Tyler Junior College)

DEPARTMENT OF MUSIC
OF
TYLER JUNIOR COLLEGE

Approved by the
Texas Association of Music Schools
(as the Texas Eastern School of Music)

★

FACULTY

Joseph Kirshbaum ..... Head of the Department of Music, Conductor of the East Texas Regional Symphony Orchestra —Theory, Violin

Edwin Fowler ..... Clarinet

Lawrence Birdsong ..... Organ

Gertrude Kirshbaum ..... Harp

John R. Hunter ..... Choral Music, Voice

Robert Reynolds ..... Piano

Pinckney Nance Ferrell ..... Piano

★

DEPARTMENT OF MUSIC

The department of music offers instruction in music for students who:

(1) Plan to pursue a professional career in music.

(2) Desire a cultural background in music.

Courses include individual lessons in Applied Music, class work in theory and music Literature and ensemble training in musical organizations. The work is designed to meet requirements of a standard four-year music curricula.

The Department of Music is fully approved and accredited by the Texas Association of Music Schools, holding full membership in that association as the Texas Eastern School of Music. This assures the acceptance at full value of credit earned.

CURRICULUM FOR MUSIC MAJORS

Bachelor of Music Degree

Freshman Year

Music 113T, 123T	6 hours
Music 113L, 123L,	6 hours
Applied Music	8 hours
Musical Organizations	2 hours
English 113, 123	6 hours
Electives	6 hours

Sophomore Year

Music 213T, 223T	6 hours
Music 212T, 222T	4 hours
Applied Music	8 hours
Musical Organizations	2 hours
English 213, 223	6 hours
Electives	6 hours

GENERAL INFORMATION

Music majors who have had no previous training in piano are required to take sufficient instruction to pass a proficiency examination in piano.

All music majors are required to participate in at least one musical organization.

The attendance of music majors is expected at all concerts by the Department of Music.

Ample opportunity is provided for individual student performance through both studio and public recitals.

Students are encouraged to use special music library materials which include numerous books, reference works, periodicals, music scores and a record collection embracing examples of all styles and forms of music.

Regular students (full time) majoring in fields other than music may enroll in music courses for which they are qualified.

Special students (part time) may enroll for Applied Music or other courses in the School of Music.

Students desiring to earn an Associate in Arts degree from this college or a Bachelor's degree from a state supported institution should elect six hours of American History and 6 hours of Government.

Music Tuition Per Semester

Individual Lessons:	Regular Students Who Enroll for 12 Sem. Hours or More		Special Students Who Enroll for Music Only	
	One 30-min. Lesson Per Week	Two 30-min. Lessons Per Week	One 30-min. Lesson Per Week	Two 30-min Lessons Per Week
Piano	$54.00	$75.00	$72.00*	$126.00*
Voice	54.00	75.00	72.00*	126.00*
Violin, Violoncello	54.00	75.00	72.00*	126.00*
Harp	54.00	75.00	72.00*	126.00*
Clarinet	54.00	75.00	72.00*	126.00*

Piano Pedagogy (One two-hour session per week) $30.00
Voice Diction (One hour per week) 18.00
Practice Room (Four hours per week) 4.00

* Includes $17.50 tuition plus special music fee.

Preparatory work in Applied Music is offered for beginning students and for students not sufficiently advanced to meet requirements for music major courses. College level students enrolling in preparatory courses may receive credit as follows:

(1) One hour credit; one half-hour lesson, 6 hours practice weekly.

(2) Two hours credit; two half-hour lessons, 10 hours practice weekly.

College Level Credit. The amount of credit is dependent upon the amount of laboratory hours per week decided upon at registration.

Credit in Strings, Woodwinds, Piano and Brasses. One semester hour credit requires six hours laboratory per week.

Two semester hours credit requires ten hours laboratory per week.

Three semester hours credit requires thirteen hours laboratory per week.

Four semester hours credit requires sixteen hours laboratory per week.

Credit in Voice. One semester hour credit requires six hours of laboratory per week.

Two semester hours credit requires nine hours of laboratory per week.

Three semester hours credit requires twelve hours of laboratory per week.

Musical Organizations. All students are eligible to audition for membership in the various musical organizations sponsored by the Department of Music.

Special Regulations. Regular and punctual attendance is required at all class sessions, musical organization rehearsals, individual lessons and other services for which the student has registered. Absence will not be excused for any reason other than illness. Unexcused absences will lower the final grade in the course concerned.

Individual lessons will not be made up in the case of unexcused absences. Students who must miss a lesson because of illness are required to notify their instructors at least one hour before the scheduled lesson in order to ask for a make-up lesson.

Students electing applied music courses for credit are required to fill out a repertoire sheet and to perform for a faculty committee each semester.

Applied music students shall consult with their instructors before participating in any public performance.

COURSE DESCRIPTIONS

Applied Music

Music 112PP, 122PP, 212PP, 222PP—Preparatory Piano. Elements of piano-forte playing; instruction material and exercices according to individual needs; from simple forms of scales and arpeggios; selected compositions from Bach, Beethoven, Clementi, Handel, Haydn, Kuhlau, Mozart, Schumann and others.

Admission by examination.

Music 114P, 124P—Freshman Piano. Major and minor scales and arpeggios studies from Cramer, Czerny, Bach. Three Part Inventions, French Suites, Mozart; Beethoven sonatas of moderate difficulty; suitable selections from Chopin, other composers of the romantic school.

Admission by examination. Two half-hour lessons and 16 hours minimum practice weekly.

Music 214P, 224P—Sophomore Piano. Major and minor scales and arpeggios in all forms and rhythms; studies from Clementi, Czerny, Phillip, Bach, Well-tempered Clavichord, English Suites; Beethoven sonatas, Op. 2, Op. 10, Op. 26; allegro movement

of a concerto; selected compositions from Chopin, Debussy, Mendelssohn, Schubert, etc.

Prerequisite: Completion of Freshman Piano or equivalent. Two half-hour lessons and 16 hours minimum practice weekly.

Music 314P, 324P—Advanced Piano. Major and minor scales in parallel and contrary motion, octaves, tenths, sixths, and double-thirds; all forms of broken chords; Bach Preludes and Fugues; Beethoven Sonatas, suitable concertos and concert repertoire; student required to play half-hour recital.

Prerequisite: Completion of Sophomore Piano or its equivalent. Two half-hour lessons and 18 hours minimum practice.

Music 112PVc, 122PVc, 212PVc, 222PVc—Preparatory Violoncello. Establishment of position; selected studies from Dotzauer, Grutzmacher, and others; appropriate solos. Admission by examination.

Music 112PBv, 122PBv, 212PBv, 222PBv—Preparatory Bass Viol. Establishment of position; studies from Simandl, Book I; scales and bowing exercises.

Admission by examination.

Music 112PH, 122PH, 212PH, 222PH—Preparatory Harp. Development of basic position; the principles of pedaling; coordination of hand and foot action; Salzedo, Method for the Harp, Tiny Tales (Series I and II), Short Stories (Volume I and II); pieces by Bach, Rameau, Schumann, Thomas and others.

Admission by examination.

Music 112PVi, 122PVi, 212PVi, 222PVi — Preparatory Violin. Principles and establishment of good position; simple scales and arpeggios; exercises from Auer, Kayser, Laoureaux, Sevcik, Wohlfhart; suitable selections from Bach, Beethoven, Corelli, Faure, Handel, Mozart, Vivaldi, and others.

Admission by examination.

Freshman Strings

Music 114Vi, 124Vi—Freshman Violin

Music 114VA, 124VA—Freshman Viola

Music 114Vc, 124Vc—Freshman Violoncello

Music 114BV, 124BV—Freshman Bass Viol

Music 114H, 124H—Freshman Harp

All form of scales and arpeggios in extended range. Selected study material emphasizing various legato and staccato styles; selected solos from the classic and romantic schools of composition. Admission by examination.

Sophomore Strings

Music 214Vi, 224Vi—Sophomore Violin

Music 214VA, 224VA—Sophomore Viola

Music 214Vc, 224Vc—Sophomore Violoncello

Music 214BV, 224BV—Sophomore Bass Viol

Music 214H, 224H—Sophomore Harp

Three and four octave scales and arpeggios in various rhythms; selected advanced study material; suitable solos from classic, romantic and contemporary composers including works in the larger forms; ensemble literature.

Prerequisite: Completion of freshman strings or its equivalent.

Voice

Music 113Vo, 123Vo—Freshman Voice. Elements of vocal culture—breath control, voice production, pure vowels, consonants; scales and arpeggios; vocalises—Concone, Panofka, Vaccai; the simpler songs in English and Italian.

Admission by examination.

Music 111D, 121D—Voice Diction. Systematic presentation of the fundamentals of pronunciation and sound production to further the singing of text with clarity and ease in German and Italian.

Admission by examination. Required of all voice majors. One hour per week.

Music 213Vo, 223Vo—Sophomore Voice. Technical development —the sustained tone of the old Italian bel canto, roulades, runs and trills; the simple opera and oratorio arias of Gluck, Handel, Mozart, Scarlatti; beginnings of German Lieder, English and American songs.

Prerequisite: Completion of Freshman Voice or equivalent.

Music 211D, 221D—Advanced Voice Diction. Continuation of Music 121D; practical application in advanced song, oratorio and opera, including French and English.

Prerequisite: Music 121D. Required of all voice majors. One hour per week.

Organ

Music 114Or, 124Or—Freshman Organ. Studies—Gleason, Method of Organ Playing; Dickison, The Art and Technique of Organ Playing; Nilsen, Pedal Studies; compositions—Bach, Eight Little Preludes and Fugues; Guilmant, Sonata in C; others.

Prerequisite: Music 212P or its equivalent. Two half-hour lessons and 16 hours minimum practice weekly.

Music 214Or, 224Or—Sophomore Organ. Continuation of studies from Gleason, Dickison, Nilsen; Carl, Master Studies for Organ; compositions by Bach, Mendelssohn, Widor, and others.

Prerequisite: Music 124Or or its equivalent. Two half-hour lessons and 16 hours minimum practice weekly.

Woodwinds

Music 112C, 122C, 212C, 222C—Preparatory Clarinet. Principles of posture, embouchure, articulation; elementary scales and arpeggios; graded studies and duets; selected simple pieces.

Admission by examination.

Music 114C, 124C—Freshman Clarinet. Etudes by Klose and Lazarus; major and minor scales, solos and duets.

Admission by examination. Two half-hour lessons and 16 hours minimum practice weekly.

Music 214C, 224C—Sophomore Clarinet. Etudes by Langenus, Lazarus, Rose, and Voxman; major and minor scales, orchestral studies; transpositions; solo and ensemble literature.

Prerequisite: Completion of Freshman Clarinet or equivalent. Two half-hour lessons and 16 hours minimum practice weekly.

Music 112S, 122S—Freshman Saxophone. Chromatic scales, all major and minor scales and arpeggios. Studies equivalent to Calliet Method, Book II; Rubank, Selected Studies, Klose-Derigny. Complete Method. Representative Solos.

Prerequisite: Admission by examination. Two half-hour lessons and 10 hours minimum practice weekly.

Music 212S, 222S—Sophomore Saxophone. Chromatic scales, all major and minor scales and arpeggios. Studies equivalent to Ferling, 48 Etudes, Rubank, Selected Studies; Klose-Derigny, Complete Method. Representative Solos.

Prerequisite: Music 122S or the equivalent. Two half-hour lessons and 10 hours minimum practice weekly.

Brass Instruments

Music 112PTb, 122PTb, 212PTb, 222PTb—Preparatory Trombone.

Music 112PTp, 122PTp, 212PTp, 222PTp—Preparatory Trumpet.

Music 112PTu, 122PTu, 212PTu, 222PTu—Preparatory Tuba.

Principles of tone production, formation of embouchure, basic articulations; selected studies and solos.

Admission by examination.

Music 114Tb, 124Tb—Freshman Trombone

Music 114Tp, 224Tp—Freshman Trumpet

Music 114Tu, 124Tu—Freshman Tuba

Major, minor and chromatic scales; extended arpeggios; selected studies, solos and duets; principles of phrasing and dynamic control. Admission by examination.

Music 214Tb, 224Tb—Sophomore Trombone

Music 214Tp, 224Tp—Sophomore Trumpet

Music 214Tu, 224Tu—Sophomore Tuba

All forms of scales and arpeggios in extended register with various articulations; selected advanced study material; representative solos including a sonata or concerto; duets, band and orchestra literature.

Prerequisite: Completion of freshman brass or its equivalent.

Theory of Music

Music 113L, 123L—Introduction to Music (2-3). A general survey of the development of the art of music designed to provide a basic understanding of the principal periods and styles of music literature; origins, folk music, plainsong, vocal and instrumental forms, elementary acoustics, biographical sketches and bibliography.

No prerequisites; open to non-music majors. Required of music majors.

Music 113T, 123T—Elementary Harmony (3-2). The study of chord building and chord connection including practice in ear training and keyboard harmony; triads and their inversions, cadences, modulations to related keys, simple non-harmonic tones, seventh chords, original part-writing exercises, melodic and harmonic diction, sight-seeing.

Prerequisite: Ability to read simple music notation. Required of music majors. Chorus is required of all elementary harmony enrollees.

Music 212T, 222T—Dictation and Sight Singing (2-1). Melodic, rhythmic, harmonic, and contrapuntal dictation; sight-singing, including the clefs, and simple modulation. Music 213T, 223T must be taken concurrently. Prerequisite: Music 123T. Required of all music majors.

Music 213T, 223T—Advanced Harmony (3-2). A further study of harmony and an introduction to counterpoint; the ninth, eleventh and thirteenth chords, chromatically altered chords, modulation to distant keys, the decorative material of harmony; a survey of the five species, Music 212T, 222T must be taken concurrently.

Prerequisite: Music 123T. Required of music majors. Chorus is required of all advanced harmony enrollees.

MUSICAL ORGANIZATIONS

Band

Music 111B, 121B

Music 211B, 221B

The official Apache Band, open to any student who has had suitable training. Three hours per week.

Chorus

Music 111Ch, 121Ch

Music 211Ch, 221Ch

A chorus in choral singing organized for the purpose of becoming familiar with the more important works of vocal ensemble. Open to all students by audition. Three hours per week.

Symphony Orchestra

Music 1130, 1230

Music 2130, 2230

Open to advanced instrumental students. Members are given practical training in professional orchestral routine in the East Texas Symphony Orchestra.

Admission by audition. Four hours per week.

Music 211CM, 221CM — Chamber Music Qualified students are encouraged to become intimately acquainted with the master works of chamber music. Small groups are formed to study the standard literature for various combinations ranging from duos to octets. Admission by audition. Two hours per week.

STORY-WRIGHT—TYLER